Eaton, China sign deal on transmissions

KALAMAZOO, Mich.—The Transmission Division of Eaton Corp. entered into a license agreement with the People's Republic of China to provide engineering documentation, technical assistance and training necessary for the manufacture of Fuller Roadranger transmissions in China.

Under contract terms, Fuller will provide technical aid in China, and Chinese engineers will be trained in the U.S. to make three 9-speed Roadrangers.

According to Derek Dawson, Transmission Division general manager, two of the 9-speed models selected are also the most popular models with fleets in the U.S. The third is a hybrid model intended for specific Chinese use.

Typical applications for the transmissions are over-the-road hauling of general freight and specialized commodities, as well as combined on/off highway uses such as construction and logging.

In addition to the licensing agreement, Fuller will also supply Roadranger transmission kits for assembly in China until that nation's manufacturing capability reaches self-sufficiency.

China's transmission program will develop manufacturing proficiency, one component at a time, over a period of years.

"China's State Planning Commission has made inter-province highway construction and motor truck transportation a top priority in the national modernization program," Dawson said.

"Their National Automotive Industry officials have indicated that accelerated plans call for import of up to 10,000 heavy-duty trucks in the next five years," he added.

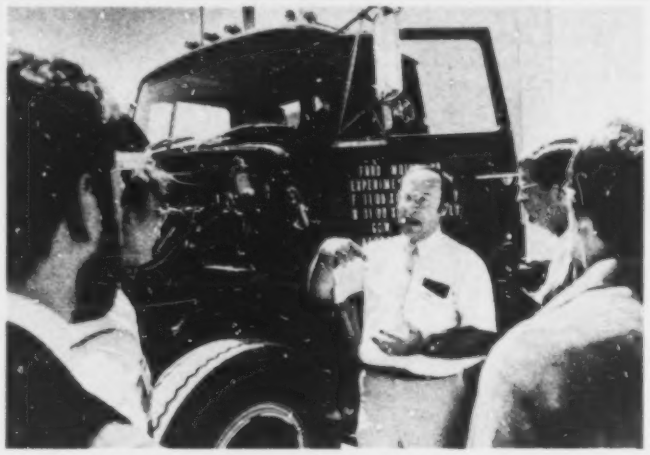
Those will be knocked down for assembly in China with Fuller Roadrangers. The company believes this is a clear signal that China is opening its domestic market in order to become a world-class industrial nation.

Current Roadrangers were selected over earlier models because of China's insistence on having the most advanced technology.

Fuller was selected after an international study by China National Automotive Industry Import and Export Corp. and Heavy Duty Truck Corp., China's largest producer of heavy trucks.

Fuel sipper

With the new Detroit Diesel 270-HP Silver 6-71 providing the power, this 1984 GMC Brigadier won Best Stock Truck Overall in the 1984 Ontario Trucksave Fuel Economy Challenge. It got 9.24 MPG in the 60,000-to-80,000-pound GCW stock-truck category.



Ford moves with new diesel

Ray Morawski, supervisor, engine development, Ford Tractor Operations, describes the advantages of the firm's new line of Brazilian built mid-range turbocharged diesel engines. Ford will introduce the engine in its new Cargo truck this fall and in its full medium-duty line in the 1987 model year.

New Ford engine line debuts on '87 models

By Arthur Fla[illegible]
Assistant Truck Editor

PALM SPRINGS, Calif.—Ford Motor Co. turbodiesel engines built in Brazil will power the company's 1987-model medium-duty trucks, Edward T. Mabley, Ford product development manager, announced at the engine introduction here.

Ford, however, will continue to offer Detroit Diesel Allison and Caterpillar engines in its trucks and as for moving to an all-Ford engine line, Mabley said the company will "see what happens."

There are no current plans to sell the engines for use in trucks outside the Ford line.

The engines will be available in the U.S. in 6.6- and 7.8-liter inline six-cylinder turbocharged variations.

The first engine in the new line scheduled to reach the U.S. is a 6.6-liter version rated at 165 HP at 2,600 RPM. It is due to appear this fall in the Cargo, a Class 6-7 truck also built in Brazil with U.S. and European designed components.

The new engines will be built at a renovated Ford plant in Sao Paulo. Ford spent some $100 million for the renovation, according to Mabley.

The engines are based on a line of Ford Tractor Operations agricultural diesels. The line also includes a four-cylinder truck engine, in production since 1982; naturally aspirated six-cylinder truck engines for use outside the U.S, and three-, four- and six-cylinder agricultural diesel engines.

Changes made in the development of the truck engines will be incorporated into the agricultural engines, according to Richard C. Ronzi, chief engineer of the Product Engineering Office for Ford Tractor Operations.

"The new Ford turbodiesel family is a key element in the company's plan for long-term success in medium and heavy trucks," Mabley said.

He noted that Ford has been one of the industry's largest purchaser of diesel engines and the company's competitors have integrated diesel engines.

Diesel engines account for some 30 percent of the cost of a mid-range truck and some 60 percent of mid-range trucks are diesel-powered, according to Mabley.

He added, "Selection of Ford Tractor Operations as the source for these mid-range truck diesel engines followed a worldwide search that included many suppliers and alternate business approaches."

The truck manufacturing business, he said, has become a worldwide industry and, in order to be competitive, "cost is key."

To that end, Ford has aligned itself with parts sources from low-cost locations.

Ford, Mabley added, is leading its suppliers to worldwide product configurations. He said the Cargo and its engine will have all North American parts numbers. For example, the Rockwell axles, which are built in Brazil for the Cargo, are interchangeable with axles manufactured in the U.S.

Engine production started in February, but those engines are naturally aspirated 6.6-liter units

Please turn to Page 30, Col. 1

Grumman moves to new HQ site in Michigan

BETHPAGE, N.Y.—Grumman Corp. is reorganizing its Vehicle Division and moving the headquarters of Grumman Olson, manufacturer of aluminum truck bodies, from Melville, N.Y., to Sturgis, Mich.

"This consolidation of management at operational sites will give us better lines of communication, make us more cost-competitive and result in increased operating efficiency," said Ronald B. Peterson, division president.

In Sturgis, Grumman Olson builds the Kurbmaster walk-in delivery bodies, Kurbette cutaway-van bodies, Kubemaster 26-foot gooseneck trailer, bodies for the gooseneck-towing Krew Kab and bodies for the United Parcel Service Package Car.

The Vehicle Division includes Gumman Olson and Grumman Emergency Products, Roanoke, Va., manufacturer of fire trucks and other emergency vehicles.

Samuel T. Rozzi, president, Grumman Emergency Products, replaces Norman Reinertsen as Grumman Olson president. The latter is the division's senior vice president.

Leonard Rothenberg, vice president, Grumman Energy Systems, succeeds Rozzi as president in Roanoke.

truck industry news

2-month registrations continue strong trend

Truck registrations were up in all segments, except Class 2, for the first two months of 1985, with Ford increasing its lead over Chevrolet.

In the heavy segment, Ford continued to narrow the gap on leader International Harvester.

Table on Page 30.

Through February, companies registered 679,958 trucks, up 16.3 percent from 584,758 in like 1984, according to R.L. Polk & Co.

New York and Oklahoma figures were compiled from manufacturers sales records. No registrations were available for Minnesota.

Ford's 185,588 registations led Chevrolet's 171,915 by 8.0 percent. During the same 1984 period, Ford led Chevrolet by a slimmer 3.9 percent: 170,816 vs. 164,476.

Both manufacturers, though, lost market share. Ford's market share of 27.30 percent was off 1.91 percentage points from last year, and Chevrolet's share of 25.29 percent was off 2.84 percentage points.

No. 3 Dodge registered 78,550 vehicles, up 36.6 percent.

Its market share of 11.55 percent was up 1.72 percentage points from a year ago.

The biggest share increase, however, was in the miscellaneous category, heavily dominated by imports.

That category registered 132,363 vehicles, up 33.3 percent. Miscellaneous trucks grabbed a 19.47 percent market share, up 2.49 percentage points from a year ago.

Registrations in the light-duty segment totaled 639,393, up 15.5 percent from 553,512.

Virtually all of the gain came in Group 1. A total of 438,587 trucks were registered in this group, up from 312,380 in like 1984.

Group 2 light-duty vehicle registrations dropped to 195,406 from 235,805 last year.

Group 3 showed a slight increase to 5,400 from 5,327 last year.

The medium-duty segment showed a hefty 34.0 percent increase, jumping to 9,189 from 6,855 a year ago.

Within the medium-duty segment, Group 4 vehicles showed a modest increase to 109 from 101 a year earlier.

Group 5 vehicle registrations nearly tripled, with 914 against 345 a year earlier.

And Group 6 had a nice gain of 27.4 percent: 8,166 against 6,409 a year earlier.

Heavy-duty registrations were up 28.6 percent, with 31,376 against 24,391 a year earlier.

Here, Group 7 grew to 11,165 from 8,389 a year earlier; while Group 8 jumped to 20,211 from 16,002.

In the heavy-duty segment, International Harvester held a narrower 6.5 percent lead over Ford compared with last year's 18.8 percent edge.

IH lost 0.56 percentage points with a market share of 21.84 percent. It was 22.40 percent last year.

Ford gained 1.64 percentage points in the heavy-duty field with a market share of 20.50 percent compared with 18.86 percent last year.

Mack's market share increased nicely to 12.32 percent, up 2.78 percentage points from a year earlier.

U.S. TRUCK REGISTRATIONS

TWO MONTHS, 1985 VS. 1984

Make	2 Mos., 1985	Percent Share of '85 Market	2 mos., 1984	Percent Share of '84 Market	Pct. Pt. Change, '85-'84
Ford	185,588	27.30	170,816	29.21	−1.91
Chevrolet	171,915	25.29	164,476	28.13	−2.84
Dodge	78,550	11.55	57,499	9.83	+1.72
GMC	47,225	6.94	44,044	7.53	−0.59
Jeep	25,913	3.81	21,056	3.60	+0.21
Plymouth	15,053	2.22	9,514	1.63	+0.59
International	9,914	1.45	7,615	1.30	+0.15
Mack	4,487	0.66	2,737	0.47	+0.19
Kenworth	1,579	0.23	2,276	0.39	−0.16
Freighliner	2,573	0.38	1,990	0.34	+0.04
Peterbilt	1,813	0.27	1,733	0.30	−0.03
White	1,623	0.24	950	0.16	−0.08
Mercedes-Benz	603	0.09	313	0.05	+0.04
Volvo	373	0.05	244	0.04	+0.01
Autocar	189	0.03	154	0.03	0.00
Western Star	187	0.02	72	0.01	+0.01
Miscellaneous	132,363	19.47	99,269	16.98	+2.49
TOTALS	679,958	100.00	584,758	100.00	

*—Registrations of all truck groups in New York and Oklahoma compiled from manufacturer's sales records. No registrations for District of Columbia.

+—Miscellaneous includes imports, Crane Carrier, Oshkosh, FWD, Hendrickson, etc.

U.S. HEAVY-DUTY REGISTRATIONS

TWO MONTHS, 1985 VS. 1984

Make	2 Mos., 1985	Percent Share of '85 Market	2 mos., 1984	Percent Share of '84 Market	Pct. Pt. Change, '85-'84
International	6,851	21.84	5,464	22.40	−0.56
Ford	6,432	20.50	4,600	18.86	+1.64
GMC	3,972	12.66	3,223	13.21	−0.55
Mack	3,865	12.32	2,328	9.54	+2.78
Kenworth	1,579	5.03	2,276	9.33	−4.30
Freightliner	2,573	8.20	1,990	8.16	+0.04
Peterbilt	1,813	5.78	1,733	7.11	−1.33
Chevrolet	1,449	4.62	1,134	4.65	−0.03
White	1,623	5.17	950	3.90	+1.27
Volvo	373	1.19	244	1.00	+0.19
Autocar	189	0.60	154	0.63	−0.03
Mercedes-Benz	221	0.70	103	0.42	+0.28
Western Star	187	0.60	72	0.30	+0.30
Miscellaneous	249	0.79	120	0.49	+0.30
TOTALS	31,376	100.00	24,391	100.00	

*—Group 7 and 8 trucks only.

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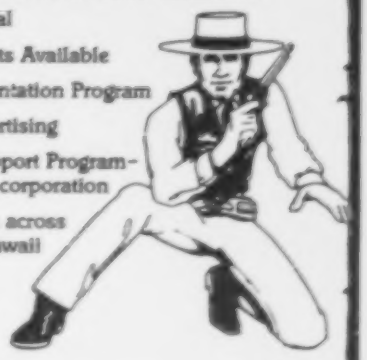

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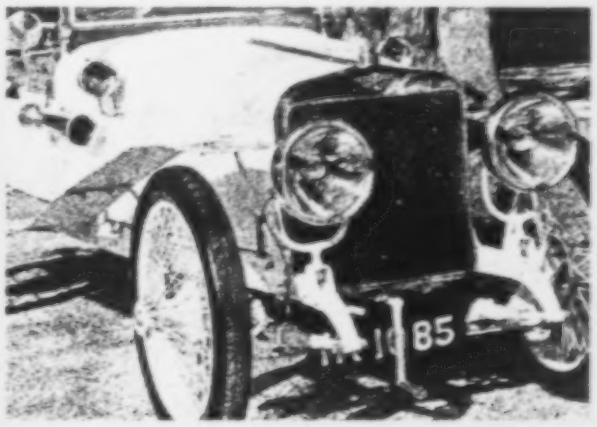

A REARVIEW

Automotive News looks back at the HISPANO-SUIZA

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Automotive News

TV ADVERTISING EXPENDITURES BY LEADING UNITS

(includes passenger cars and trucks)

	1984 Network	1984 Spot TV	1984 Total TV	1983 Network	1983 Spot TV	1983 Total TV	Percent Change
General Motors	$202,934,100	$37,456,900	$240,391,000	$172,041,400	$25,225,600	$197,267,000	+22
Ford	161,332,700	39,323,500	200,656,200	165,091,100	37,014,500	202,105,600	− 1
Chrysler	93,537,400	27,446,500	121,083,900	84,193,700	18,608,900	102,802,600	+18
Nissan	50,665,800	41,022,400	91,688,200	33,602,900	43,116,900	76,719,800	+20
Toyota	18,544,100	58,337,100	76,881,200	22,852,500	42,505,600	65,358,100	+18
American Motors	56,621,700	6,068,200	62,689,900	50,972,300	6,221,400	57,193,700	+10
Volkswagen	22,023,900	15,656,600	37,680,500	22,120,000	15,357,400	37,477,400	+ 1
Mazda	26,381,900	4,186,600	30,568,500	27,175,900	2,265,500	29,441,400	+ 4
Honda	21,440,600	3,458,400	24,899,000	19,943,900	2,514,700	22,458,600	+11
Subaru	12,615,000	5,247,400	17,862,400	11,908,700	5,175,900	17,084,600	+ 5
Mercedes-Benz	13,818,000	422,400	14,240,000	12,677,100	2,229,100	14,906,200	− 4
Mitsubishi	—	14,045,500	14,045,500	—	11,438,200	11,438,200	+23
BMW	2,963,300	6,541,800	9,525,100	1,488,200	3,719,000	5,207,200	+83
Volvo	331,700	6,969,100	7,300,800	225,300	4,242,400	4,467,700	+63
Isuzu (Amer. Isuzu)	3,190,700	1,775,000	4,974,700	1,735,800	2,560,800	4,296,600	+16
Peugeot	—	3,937,800	3,937,800	—	4,742,900	4,742,900	−17
BL	—	1,414,100	1,414,100	—	1,687,100	1,687,100	−16
Saab	—	1,207,400	1,207,400	—	689,000	689,000	+75
TOTAL	$689,280,300	$274,353,100	$963,633,400	$626,031,100	$225,208,800	$851,239,900	+13

Source: Television Bureau of Advertising from Broadcast Advertisers Reports

1984 total rises 25 pct. to $1.7 billion

Auto industry boosts TV spending

By Edward Lapham
Marketing Editor

The auto industry increased its television ad spending last year to take advantage of special-event programming and heightened viewer interest, recently released statistics show.

Automobile advertising on television, the medium's second largest ad category, jumped 25 percent in 1984 to $1.7 billion, according to the Television Bureau of Advertising (TVB).

"The Olympics and the election were the two major ongoing events which brought more money to the medium in 1984," said Fred Danzig, editor of the industry trade publication Advertising Age.

"Advertisers took advantage of the large viewing audiences to deliver their messages to a greater number of people."

The single largest category, advertising by the auto companies themselves, increased 13 percent to nearly $964 million.

However, because the advertising rates increased, the jump in expenditures does not reflect a corresponding jump in the amount of advertising.

"The rates went up 10 to 12 percent last year, so any increase over that reflects an increase in advertising," Danzig said. "Anything less means a decrease."

Although real increases in TV advertising by the auto companies were slight after factoring out the rate hikes, spending by dealers and dealer associations seemed to reflect bargain spot-buying tied to special events.

Expenditures for TV advertising by the 15 biggest-spending dealers rose 49 percent to $257 million.

Meanwhile, TV ad spending by leading-make dealer associations rose 63 percent to more than $249 million.

Within the company spending category, there were some hefty increases, despite the overall category stasis.

TVB showed BMW with the largest overall increase, 83 percent, for total 1984 TV spending of more than $9.5 million.

Saab registered the second largest increase with a 75 percent jump in outlays to $1.2 million.

Volvo's spending rose 63 percent to $7.3 million.

General Motors, of course, spent the most in 1984. Its total of $240 million was up 22 percent.

Ford Motor Co.'s total ad spending actually declined one percent in 1984 to $200.7 million, while Chrysler Corp.'s 1984 TV ad expenditures of $121 million were up 18 percent.

American Motors' total rose 10 percent to $62.7 million.

Among the imports, Nissan remained the largest corporate advertiser, with total spending up 20 percent to $91.7 million.

Toyota's 1984 TV ad spending was up 18 percent to $76.9 million.

At the other end of the spectrum, Peugeot whacked its TV ad spending 17 percent to $3.9 million. Jaguar cut its expenditures 16 percent to $1.4 million.

Among the top 15 dealer advertisers, Cal Worthington's Los Angeles operation remained the biggest spender, despite a 4 prcent total decrease, with outlays of more than $2.8 million.

Cal Worthington's Sacramento operation spent $1.8 million and the new Seattle operation spent an additional $1.3 million, earning the well-known TV ad personality three of the top 15 spots.

The single largest increase in TV ad spending among the top 15 dealerships was registered by Long-Lewis Ford, Birmingham, Ala., with a whopping 326 percent increase to $958,300.

Vaughn Burrell, Long-Lewis vice president and general manager, said the increase reflected a shift in buying. "We used to spend a little in TV, a little in radio and a little in newspaper but, long-term, we found out we can get twice or three times the coverage on TV for half the money," Burrell said.

Long-Lewis, founded in 1911, is the oldest dealership in Alabama, he said, but the intrusion of a new freeway leg isolated the store from traffic patterns.

"We tried running a map in newspaper ads, but that didn't help people find the store," Burrell said. "Now, we just give the address in the TV ads and hope people can find us with maybe only one stop to ask for directions.

"We're getting 100 to 125 buyers a month from more than 75 miles away. That alone makes it worth it."

The dealership retails about 300 new cars and trucks and 169 used cars a month.

BMW dealer associations posted the biggest total spending increase in that category, with a 381 percent jump to nearly $6.9 million.

AMC dealer associations also showed a large increase, 337 percent, to a spending total of more

Please turn to Page 32, Col. 5

TOP TV DEALER ASSOCIATION ADVERTISERS

	1984	1983	Percent Change
Nissan/Datsun	$33,515,100	$23,842,100	+ 41
Ford	28,026,400	13,406,400	+109
Chevrolet	23,755,600	14,995,200	+ 58
Oldsmobile	19,058,200	17,657,900	+ 8
Pontiac	18,046,000	6,784,900	+166
Buick	13,709,900	11,970,600	+ 15
Dodge	10,585,100	7,988,300	+ 33
Mazda	10,255,700	4,378,900	+134
Subaru	9,715,700	8,301,500	+ 17
Toyota	9,689,600	7,115,400	+ 36
Honda	7,236,300	3,959,900	+ 83
Lincoln-Mercury	7,085,000	1,923,100	+268
BMW	6,879,300	1,430,700	+381
American Motors	6,342,800	1,451,800	+337
Cadillac	5,597,400	2,545,900	+120
Renault	5,435,400	4,700,500	+ 16
Volkswagen	5,333,700	3,296,500	+ 62
Chrysler-Plymouth	5,203,700	2,336,900	+123
General Motors	4,824,400	2,494,200	+ 93
Audi	3,217,400	2,442,900	+ 32
TOTAL	$249,325,700	$152,348,400	+ 63

Source: Television Bureau of Advertising

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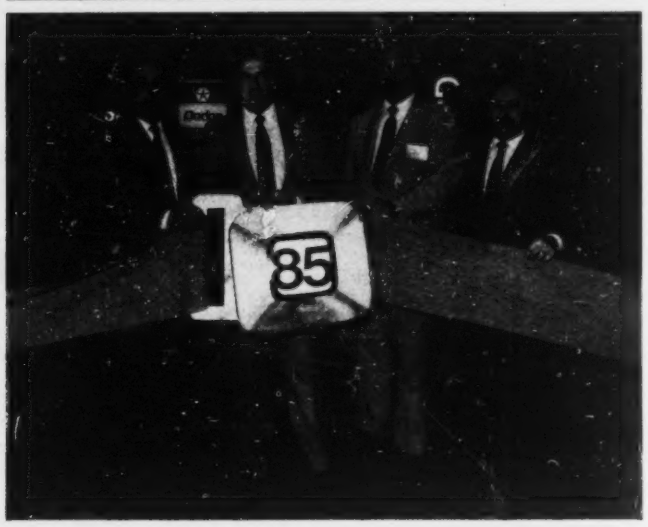


Getting on with the show

Greater St. Louis Automotive Assn. representatives officially open the auto show at Cervantes Convention Center. The show attracted 250,000 persons and there were 418 confirmed floor sales. From left are: Elmer Jung, Jung Chevrolet, domestic lines chairman; Jim Meagher, Meagher Chevrolet-Oldsmobile, president of the group; Don Gilbert, executive vice president, and Ted Weiner, operations director, Cahners Exposition Group, Boston.

Ford turbodiesel engines set to debut on '87 models

Continued from Page 16

intended for Brazilian Cargos only.

Production of the U.S.-bound 6.6-liter units will begin in mid-May. Production of the 7.8-liter engines is scheduled to start in April, 1986.

Power outputs for the 7.8-liter engines will be 185, 210 and 235 HP. The 210 and 235-HP units will feature turbocharger aftercooling.

Mabley said Ford could, in the future, bump power output to 250 HP.

When Ford brings in the engines to power its full line of mid-range trucks, 160- and 170-HP 6.6-liter units will be added to the range.

The 6.6- and 7.8-liter engines will be offered in Ford's L, F and B series trucks with gross vehicle weights ranging from 17,000 to 66,000 pounds and tractors with gross combination weights up to 80,000 pounds.

Ford is not placing application restrictions on the engines, and Mabley said they will carry a warranty that is competitive with the industry's best.

Although Ford has not announced plans to import its four-cylinder diesel truck engine to the U.S., Ronzi indicated that engine might also find its way into a North American Cargo truck. The four-cylinder diesel with turbocharger is currently used to power Ford's F-4000, a Brazilian commercial truck which resembles older models of the U.S. F-350 pickup truck.

"The Cargo can go bigger or smaller," Ronzi hinted. "There is a possibility of downsizing the Cargo."

Ford will produce 7,000 to 8,000 truck engines to power an equal number of Cargos in its first year with the engine and truck line, according to Mabley.

Ronzi noted that the cylinder heads and blocks for the first-year engines will be produced in England and shipped to Brazil. However, the Brazilian plant will produce complete engines when it gets up to full steam.

The new, U.S.-bound truck engines are designed so they will be able to meet the new EPA emission standards for commercial-size diesel engines when they become effective in 1988.

The engines, according to a Ford engineer, could be adjusted to meet the standards now, but with a fuel-economy penalty.

In the intervening years before the EPA rules take effect, Ford will make changes to improve economy in an emission-controlled engine, the engineer said.

GM extends insurance plan for belt users

DETROIT.—General Motors' insurance arm, Motors Insurance Corp., is offering a new, separate $10,000 seat-belt-user insurance program in 39 states to encourage motorists to "buckle up," MIC President J.J. MacDonald announced.

A year ago, GM began providing seat-belt-user insurance for a one-year period at no cost to purchasers of new GM cars and light trucks. Similar coverage was available through GM of Canada.

Since the program is expiring for many GM vehicle owners, GM's insurance subsidiary allows customers to purchase extension coverage for nominal fees.

In addition, it is being extended to owners of other than GM vehicles as long as the vehicle is equipped with manufacturer-installed safety belts.

The premiums are $6.25, $9.75 and $13.25 for one, two and three years, respectively.

The policy provides $10,000 to the estate of the insured person or any relative who lives with the insured person if an automobile accident causes the death of one of the individuals while wearing a seat belt or child-restraint.

NADA names Brooks director in Arizona

SCOTTSDALE, Ariz.—C.M. (Bud) Brooks, Brooks Cadillac here, has been chosen as the Arizona director for NADA.

Brooks served as president of the Arizona Automobile Dealers Assn. in 1980-81 and was president of the Scottsdale Automobile Dealers Assn. from 1972 to 1976.

NEW TRUCK SALES BY MAKE AND GVW CLASS

FEBRUARY 1985 VS. 1984*

		Group 1 6,000 lbs and less	Group 2 6,001-10,000	Group 3 10,001-14,000	Group 4 14,001-16,000	Group 5 16,001-19,500	Group 6 19,501-26,000	Group 7 26,001-33,000	Group 8 33,001 and over	Make Totals
AUTOCAR	Feb. '85	.....	.....	.....	.....	.....	.....	.....	83	83
	Feb. '84	.....	.....	.....	.....	.....	.....	.....	71	71
	Year to Date '85	.....	.....	.....	.....	.....	.....	.....	189	189
	Year to Date '84	.....	.....	.....	.....	.....	.....	.....	154	154
CHEVROLET	Feb. '85	48,223	37,578	1,824	.....	16	418	807	33	88,899
	Feb. '84	42,097	37,356	2,810	.....	10	368	578	27	83,246
	Year to Date '85	92,080	73,892	3,507	.....	36	951	1,390	59	171,915
	Year to Date '84	83,952	73,495	5,134	.....	31	730	1,079	55	164,476
(Memo Units)#	Feb. '85	36,657	14,111	.....	.....	.....	.....	.....	.....	50,768
	Feb. '84	28,176	14,990	.....	.....	.....	.....	.....	.....	43,166
	Year to Date '85	68,643	26,611	.....	.....	.....	.....	.....	.....	95,254
	Year to Date '84	56,686	29,210	.....	.....	.....	.....	.....	.....	85,896
DODGE	Feb. '85	28,389	12,387	.....	.....	.....	.....	.....	.....	40,776
	Feb. '84	21,302	10,526	.....	.....	.....	.....	.....	.....	31,828
	Year to Date '85	54,673	23,877	.....	.....	.....	.....	.....	.....	78,550
	Year to Date '84	37,769	19,730	.....	.....	.....	.....	.....	.....	57,499
(Memo Units)#	Feb. '85	20,504	6,350	.....	.....	.....	.....	.....	.....	26,854
	Feb. '84	14,199	6,563	.....	.....	.....	.....	.....	.....	20,762
	Year to Date '85	40,178	12,490	.....	.....	.....	.....	.....	.....	52,668
	Year to Date '84	25,260	12,357	.....	.....	.....	.....	.....	.....	37,617
FORD	Feb. '85	54,821	35,568	.....	.....	.....	1,245	2,157	899	94,680
	Feb. '84	22,852	59,662	.....	.....	.....	1,298	1,585	661	86,058
	Year to Date '85	103,761	73,056	.....	.....	.....	2,339	4,558	1,874	185,588
	Year to Date '84	46,579	117,504	.....	.....	.....	2,133	3,145	1,455	170,816
(Memo Units)#	Feb. '85	39,031	11,409	.....	.....	.....	.....	.....	.....	50,440
	Feb. '84	21,972	19,896	.....	.....	.....	.....	.....	.....	41,868
	Year to Date '85	71,690	23,958	.....	.....	.....	.....	.....	.....	95,648
	Year to Date '84	44,242	39,469	.....	.....	.....	.....	.....	.....	83,711
FREIGHTLINER	Feb. '85	.....	.....	.....	.....	.....	.....	.....	1,175	1,175
	Feb. '84	.....	.....	.....	.....	.....	.....	.....	924	924
	Year to Date '85	.....	.....	.....	.....	.....	.....	.....	2,573	2,573
	Year to Date '84	.....	.....	.....	.....	.....	.....	.....	1,990	1,990
GMC	Feb. '85	10,579	8,976	559	.....	434	364	1,173	810	22,895
	Feb. '84	9,830	10,208	74	.....	160	420	960	886	22,538
	Year to Date '85	20,670	19,420	1,516	.....	855	792	2,218	1,754	47,225
	Year to Date '84	19,537	20,021	173	.....	314	776	1,784	1,439	44,044
(Memo Units)#	Feb. '85	7,596	3,090	.....	.....	.....	.....	.....	.....	10,686
	Feb. '84	5,844	3,543	.....	.....	.....	.....	.....	.....	9,387
	Year to Date '85	14,344	6,352	.....	.....	.....	.....	.....	.....	20,696
	Year to Date '84	11,917	6,690	.....	.....	.....	.....	.....	.....	18,607
INTERNATIONAL	Feb. '85	.....	.....	.....	.....	.....	1,380	1,099	2,264	4,743
	Feb. '84	.....	.....	.....	.....	.....	1,142	1,054	1,817	4,013
	Year to Date '85	.....	.....	.....	.....	.....	3,063	2,378	4,473	9,914
	Year to Date '84	.....	.....	.....	.....	.....	2,151	2,039	3,425	7,615
JEEP	Feb. '85	10,683	1,567	.....	.....	.....	.....	.....	.....	12,250
	Feb. '84	8,444	1,947	.....	.....	.....	.....	.....	.....	10,391
	Year to Date '85	22,440	3,473	.....	.....	.....	.....	.....	.....	25,913
	Year to Date '84	17,001	4,055	.....	.....	.....	.....	.....	.....	21,056
(Memo Units)#	Feb. '85	10 683	1,395	.....	.....	.....	.....	.....	.....	12,078
	Feb. '84	8,444	1,638	.....	.....	.....	.....	.....	.....	10,082
	Year to Date '85	22,440	3,098	.....	.....	.....	.....	.....	.....	25,538
	Year to Date '84	17,001	4,055	.....	.....	.....	.....	.....	.....	21,056
KENWORTH	Feb. '85	.....	.....	.....	.....	.....	.....	.....	769	769
	Feb. '84	.....	.....	.....	.....	.....	.....	.....	1,251	1,251
	Year to Date '85	.....	.....	.....	.....	.....	.....	.....	1,579	1,579
	Year to Date '84	.....	.....	.....	.....	.....	.....	.....	2,276	2,276
MACK	Feb. '85	.....	.....	.....	.....	.....	315	65	1,775	2,155
	Feb. '84	.....	.....	.....	.....	.....	225	32	1,155	1,412
	Year to Date '85	.....	.....	.....	.....	.....	622	146	3,719	4,487
	Year to Date '84	.....	.....	.....	.....	.....	409	49	2,279	2,737
MERCEDES-BENZ	Feb. '85	.....	.....	.....	.....	.....	145	116	.....	261
	Feb. '84	.....	.....	.....	.....	.....	88	45	.....	133
	Year to Date '85	.....	.....	.....	.....	.....	382	221	.....	603
	Year to Date '84	.....	.....	.....	.....	.....	210	103	.....	313
PETERBILT	Feb. '85	.....	.....	.....	.....	.....	.....	.....	876	876
	Feb. '84	.....	.....	.....	.....	.....	.....	.....	952	952
	Year to Date '85	.....	.....	.....	.....	.....	.....	.....	1,813	1,813
	Year to Date '84	.....	.....	.....	.....	.....	.....	.....	1,733	1,733
PLYMOUTH	Feb. '85	7,636	.....	.....	.....	.....	.....	.....	.....	7,636
	Feb. '84	5,410	19	.....	.....	.....	.....	.....	.....	5,429
	Year to Date '85	15,063	.....	.....	.....	.....	.....	.....	.....	15,063
	Year to Date '84	9,469	45	.....	.....	.....	.....	.....	.....	9,514
VOLVO	Feb. '85	.....	.....	.....	.....	.....	.....	97	60	157
	Feb. '84	.....	.....	.....	.....	.....	.....	94	29	123
	Year to Date '85	.....	.....	.....	.....	.....	.....	204	169	373
	Year to Date '84	.....	.....	.....	.....	.....	.....	179	65	244
WESTERN STAR	Feb. '85	.....	.....	.....	.....	.....	.....	.....	87	87
	Feb. '84	.....	.....	.....	.....	.....	.....	.....	39	39
	Year to Date '85	.....	.....	.....	.....	.....	.....	.....	187	187
	Year to Date '84	.....	.....	.....	.....	.....	.....	.....	72	72
WHITE	Feb. '85	.....	.....	.....	.....	.....	.....	.....	793	793
	Feb. '84	.....	.....	.....	.....	.....	.....	.....	325	325
	Year to Date '85	.....	.....	.....	.....	.....	.....	.....	1,623	1,623
	Year to Date '84	.....	.....	.....	.....	.....	.....	.....	950	950
MISCELLANEOUS☆	Feb. '85	66,390	830	179	43	12	6	26	111	67,597
	Feb. '84	53,001	513	12	40	.....	.....	7	54	53,627
	Year to Date '85	129,900	1,688	377	109	23	17	50	199	132,363
	Year to Date '84	98,073	955	20	101	.....	.....	11	109	99,269
TOTALS	Feb. '85	226,721	96,906	2,562	43	462	3,873	5,540	9,725	345,832
	Feb. '84	169,936	120,231	2,896	40	170	3,541	4,355	8,191	302,360
	Year to Date '85	438,587	195,406	5,400	109	914	8,166	11,165	20,211	679,958
	Year to Date '84	312,380	235,805	5,327	101	345	6,409	8,389	16,002	584,758

*—New York and Oklahoma registrations compiled from manufacturers' sales records.

#—Memo units are trucks which are part of the total listed above each entry. Chevrolet memo units are Chevy-Van, El Camino and Blazer; Dodge, compact trucks; Ford, Econoline and Bronco; GMC, Vandura and Jimmy.

☆— Miscellaneous includes imports, FWD, Hendrickson, Oshkosh, etc.

—Compiled from R. L. Polk & Co. data

NADA, leasing groups ask IRS for help

Business-car problems persist

By Geoff Sundstrom
Washington Reporter

WASHINGTON.—Although contemporaneous record-keeping requirements for business vehicles are to be repealed by Congress—pending a House-Senate conference to reconcile legislation—auto dealers and auto leasing companies, as well as those who buy and lease automobiles for business purposes, still have problems with proposed tax regulations for business vehicles.

In recent IRS hearings on tax treatment of non-cash fringe benefits, NADA and attorneys for the National Vehicle Leasing Assn. and the American Automotive Leasing Assn. spoke in favor of amending the proposed IRS rules.

Each group asked the IRS to further simplify withholding requirements for personal use of business vehicles.

NVLA also asked that certain changes be made regarding the eligibility of leased vehicles for the Investment Tax Credit and that a recapture mechanism be included in the rules applicable to vehicles that do not fully benefit from the ITC during the life of the lease.

AALA asked for a greater range of safe-harbor exemptions that would cover fleet vehicles on the road for most of the business day with a fairly constant percentage of business use.

The lease group also asked that all trucks and vans used exclusively for business be exempted from the "luxury automobile" limitations and that IRS exempt persons without an office or other regular place of business from commuting restrictions.

AALA further urged an increase in the special commuting valuation of $3 per day.

In the matter of rules governing valuation of automobiles by Annual Lease Values, AALA sought elimination of the requirement that fair market values be determined "without regard to any group or volume discount." It called that "unclear and impracticable."

All three groups expressed concern that the new regulations would hurt car sales, particularly sales of domestically produced vehicles.

Sales would suffer, they said, because many fleet buyers are opting to provide vehicle allowances to their employes rather than providing them with cars.

Although employes who are given vehicle allowances are likely to purchase a vehicle, NADA said the average period of use for an employer-provided car is only 30 months, while the average period for a car owned by an individual is 48 months.

"Clearly, the regulations will have an adverse impact on sales even if company cars are replaced by personal cars," the dealer group said.

The IRS was also told that the overwhelming majority of leased vehicles in the U.S. are of domestic origin and that a shift to vehicle allowances will mean a greater share of import sales in the U.S.

According to James Culotta, president of Detroit-based McCullough Leasing, Inc., the proposed IRS rules governing tax treatment of leased vehicles would mean that "a significant portion of the five million corporate leased vehicles—of which less than 4 percent are now foreign—could be replaced by Japanese imports which now account for 18 percent of the U.S. market."

Views similar to those expressed by Culotta were presented before the IRS by both leasing associations.

NVLA said, "The end result of the proposed rules is likely to be that a program designed to generate tax revenues ultimately ends up creating exactly the opposite result because of the dampening effect on domestic vehicle sales combined with additional administrative costs."

A membership survey by the NVLA showed that an average fleet that placed 934 vehicles in service last year had lost 32 vehicles per fleet thus far in 1985 and that an average of 109 vehicles per fleet for all of 1985 were expected to be lost due to record keeping and compensation regulations.

Although the survey was conducted prior to congressional action on the record-keeping issue, all three groups indicated that the atmosphere surrounding the tax law changes had fostered uncertainty and confusion among fleet customers and had contributed to decisions to sell corporate cars, cancel leasing plans, or not to purchase new fleet vehicles.

It has also been suggested that the rules have given corporations a convenient rationale to rid themselves of an increasingly expensive prerequisite.

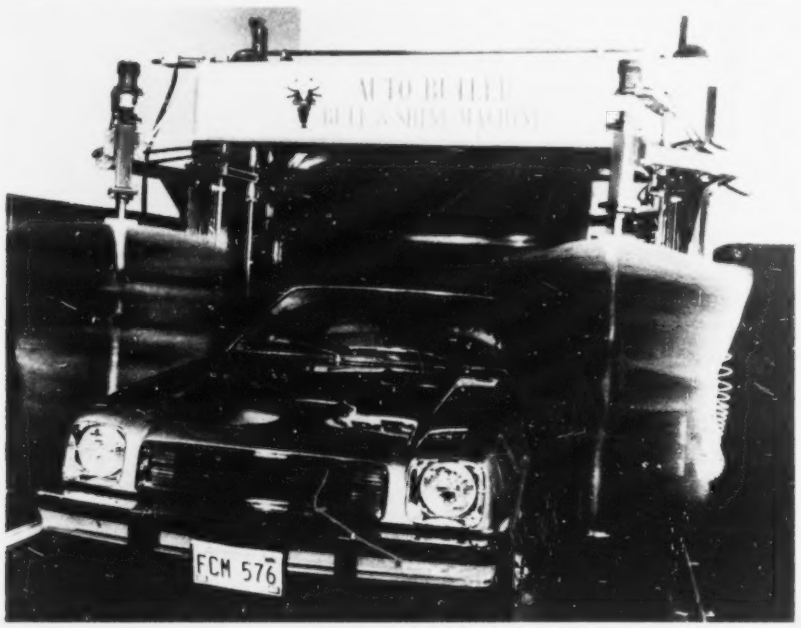
Because the rate of increase in vehicle operating costs has been greater than the rate of inflation, some corporations are expected to use the new tax law to cut costs by moving to vehicle allowances, which are easier to control.

NADA also asked the tax agency to lift what NADA believes to be "unreasonable and unnecessary burdens on dealers who provide company cars to employes, other than salespersons who are provided demonstrators."

According to Robert Wade, NADA chief counsel, the proposed rules mean a dealer must evaluate employe use each time the employe is assigned a new car and that the value of each new car must also be computed. He said this would be a substantial task even if the standard for determining fair market value were clear.

Wade told IRS that while NADA understands that the personal use of an employer-provided car constitutes income to the employe, NADA "strongly urges IRS and the Department of the Treasury to provide a means for measuring that income that takes into account the unique pattern of employe automobile use in the automobile business."

Wade said the IRS should allow dealers to treat an employe as if he or she used one car for 12 months and value that car by reference "to some average figure that would apply for all of the dealer's employes," such as the average sticker price of all cars sold by the dealer in the previous year.



MR. DEALER, WILL YOU SPEND 15 MINUTES OF YOUR VALUABLE TIME TO LEARN HOW TO ADD $40,000, $50,000, EVEN $100,000 TO YOUR BOTTOM LINE WITH **NO CAPITAL INVESTMENT.**

HERE'S HOW: BROADWAY EQUIPMENT COMPANY HAS PRODUCED A 15 MINUTE FILM THAT TELLS THE AUTO BUTLER SERVICE BUILDER STORY. SIMPLY FILL IN THE COUPON BELOW AND SEND IT TO: AUTO BUTLER, INC., 1110 WEST BROADWAY, MINNEAPOLIS, MN 55411.

AUTO BUTLER WILL SEND YOU THE FILM TO VIEW AT YOUR LEISURE IN THE PRIVACY OF YOUR OWN HOME OR OFFICE. (ALL YOU NEED IS A BETA OR VHS VIDEO PLAYER). WHEN THE FILM IS RETURNED, YOU'LL BE SENT A MINIATURE MR. AUTO BUTLER DOLL AS SHOWN IN THE PHOTO. A GREAT ATTENTION GETTER AND CONVERSATION PIECE FOR ANY OFFICE OR SHOWROOM FLOOR OR A GREAT GIFT FOR A SPECIAL DAUGHTER, SON OR GRANDCHILD. (COULD BE THE NEXT CABBAGE PATCH KID). A RETAIL VALUE OF OVER $50.00. BUT THE REAL KICKER COMES FROM DISCOVERING HOW YOUR DEALERSHIP CAN BENEFIT FROM THE AUTO BUTLER SERVICE BUILDER SYSTEM.

YOU HAVE NOTHING TO LOSE AND A WHOLE LOT TO GAIN BY SENDING THE COUPON BELOW. (THE FILM STARS SUPER CAR SALESMAN JACKIE COOPER).

___ Yes, I'm interested in viewing the Auto Butler film, to learn first hand how I can add big profits to my bottom line. I agree to return said film after I have used it.

PLEASE SEND BETA ___ VHS ___

And, Yes, send me the Auto Butler Doll as shown in the photo.

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TITLE _____
DEALERSHIP _____
STREET _____
CITY _____
STATE _____ ZIP _____
PHONE ( ) _____

PHONE 1-800-328-7434
IN MN 612-529-3345

QUALIFIED NEW CAR DEALERS ONLY

Maryland dealer agrees to refund extra charges

ROCKVILLE, Md.—A local auto dealership has agreed to make refunds that could total $20,000 to customers as a result of a settlement agreement with the Montgomery County Office of Consumer Affairs (OCA).

OCA alleged that Montgomery County Cars had routinely added a charge for "mechanical and appearance labor" to the selling price of the automobiles it sold, when this charge actually represented additional dealer profit.

OCA alleged that it was a misrepresentation, in violation of the County's Consumer Protection Act, to describe additional dealer profit as mechanical and appearance labor.

While denying any violation of the Consumer Protection Act, Montgomery County Cars agreed to provide a fund of $20,000 for refunds to consumers who have had such charges included in the selling price of automobiles purchased. A consumer should first file a complaint with OCA to request a refund, according to George Rose, Chief of OCA's automotive unit.

"We will review all complaints filed to determine who is eligible for a refund under the agreement," said Rose. "To qualify for reimbursement from the fund, a complaint must be filed within 180 days."

Montgomery County Cars has also agreed to disclose clearly any charges for additional dealer profit on both the purchase order and on a dealer's window sticker located next to the manufacturer's window sticker.

Auto industry hikes spending for TV ads

Continued from Page 24

than $6.3 million. That was augmented by Renault dealer association spending which increased 16 percent to $5.4 million.

Lincoln-Mercury dealer associations spent more than $7 million in 1984, a 268 percent boost.

The Nissan/Datsun dealer associations once again had the deepest pockets in 1984 with total TV ad outlays of ‡33.5 million, a 41 percent increase over 1983 spending.

Ford Dealer associations boosted their TV spending by 109 percent to bump Chevrolet dealer associations out of the second spot with a total of $28 million.

In 1984, Chevrolet dealer associations spent $23.8 million, an increase of 58 percent over 1983 TV ad spending.

All of the dealer associations monitored by TVB showed net increases. In fact, all of the increases were double-digit jumps except for the 8 percent increase posted by Oldsmobile dealer associations.

LEADING TV AUTO DEALER ADVERTISERS

	1984	1983	Percent Change
Cal Worthington (Los Angeles)	$2,867,700	$2,992,900	− 4
Potamkin Cadillac (New York)	2,603,200	1,194,800	+118
Cal Worthington (Sacramento)	1,830,900	1,661,300	+ 10
Celozzi-Ettleson (Chicago)	1,815,500	914,300	+ 99
Jeff Legum (Baltimore)	1,690,100	1,489,400	+ 13
Pete Ellis Dodge (Los Angeles)	1,508,200	547,800	+175
Wilson Ford (Los Angeles)	1,443,500	386,000	+274
Wagstaff House (Salt Lake)	1,419,000	567,800	+150
Cal Worthington (Seattle)	1,288,100	.....	+
Casey Chevrolet (Norfolk)	1,162,000	393,600	+195
Town & Country Ford (Charlotte)	1,144,300	1,127,400	+ 1
Fremont Ford (San Francisco)	1,114,300	472,100	+136
Gulf Coast Dodge (Houston)	993,700	463,300	+114
Nationwide Datsun (Baltimore)	979,700	1,095,500	− 11
Long-Lewis Ford (Birmingham)	958,300	224,700	+326
TOTAL	$257,027,500	$172,875,300	+ 49

Source: Television Bureau of Advertising.

factories list auction dates

American Motors

April 30—Arena Auto Auction, Chicago, and High Point Auto Auction, High Point, N.C.

Chrysler Corp.

April 30—Hatfield Auto Auction, Hatfield, Pa.; Aptco Auto Auction, Taylor, Mich.; NuCar-Prep System, Santa Fe Springs, Calif., and Florida Auto Auction of Orlando, Ocoee, Fla.

May 1—Butler Auto Auction, Gibsonia, Pa.; Sand Mountain Auto Auction, Boaz, Ala.; Minneapolis Auto Auction, Plymouth, Minn., and Dallas Auto Auction, Grand Prairie, Tex.

May 2—Clanton's Auto Auction, Darlington, S.C.

May 3—Concord Auto Auction, Acton, Mass., and Floyd Hauhe Auto Auction, Bridgeton, Mo.

May 7—Hatfield Auto Auction, Hatfield, Pa., and Golden Gate Auto Auction, Fremont, Calif.

May 8—Columbus Fair Auto Auction, Obetz, O.; Southern Auto Auction, Warehouse Point, Conn.; South Seattle Auto Auction, Kent, Wash., and Indianapolis Auto Auction, Indianapolis.

May 9—Fredericksburg Auto Auction, Fredericksburg, Va.; Atlanta Auto Auction, Red Oak, Ga., and Arena Auto Auction, Chicago.

Ford Motor Co.

April 30—Harrisonburg Auto Auction, Harrisonburg, Va.

May 1—Golden Gate Auto Auction, Fremont, Calif; Metro Auto Auction of Kansas City, Lee's Summit, Mo., and Northstar Auto Auction, Shakopee, Minn.

May 2—Nashville Auto Auction, Nashville.

May 8—Columbus Fair Auto Auction, Obetz, O., and Concord Auto Auction, Acton, Mass.

May 9—Arena Auto Auction, Chicago, and Dallas Auto Auction, Dallas.

May 15—Indianapolis Auto Auction, Indianapolis; Lakeland Auto Auction, Lakeland, Fla., and Brasher's Southern California Auto Auction, Fontana, Calif.

May 16—Aptco Auto Auction, Taylor, Mich.; 166 Auto Auction, Springfield, Mo., and Skyline Auto Exchange, Fairfield, N.J.

May 22—Northway Exchange, Clifton Park, N.Y., and Clanton's Auto Auction, Darlington, S.C.

May 23—Floyd Hauhe Auto Auction, Bridgeton, Mo.; Baltimore Washington Auto Exchange, Baltimore; Big H Auto Auction, Houston, and Denver Auto Auction, Englewood, Colo.

General Motors

May 1—Golden Gate Auto Auction, Fremont, Calif., and Hatfield Auto Auction, Hatfield, Pa.

May 2—Aptco Auto Auction, Taylor, Mich.; Floyd Hauhe Auto Auction, Bridgeton, Mo., and Dallas Auto Auction, Dallas.

May 7—Florida Auto Auction of Orlando, Orlando.

May 8—Northstar Auto Auction, Shakopee, Minn.; Brasher's Auto Auction, Fontana, Calif., and Omaha Auto Auction, Omaha.

May 9—Nashville Auto Auction, Nashville.

May 14—Southern Auto Auction, E. Windsor, Conn., and South Seattle Auto Auction, Kent, Wash.

May 15—Clanton's Auto Auction, Darlington, S.C.

May 16—Indianapolis Auto Auction, Indianapolis, and Big H Auto Auction, Houston.

May 22—Brasher's Salt Lake Auto Auction, Salt Lake City, and Metro Auto Auction, Kansas City.

May 23—Butler Auto Auction, Gibsonia, Pa., and Arena Auto Auction, Chicago.

Used Car Sales
Auction Averages

April to date	$4,957
Month ago	$4,928
Year ago	$5,418

Model Breakdown
Auction Averages

	APR. 1985	MAR. 1985	FEB. 1985
1985	$11,656	$12,924	$14,691
1984	$8,678	$9,046	$8,850
1983	$6,448	$6,028	$6,171
1982	$5,224	$5,332	$5,185
1981	$3,965	$4,544	$4,049
1980	$3,563	$3,474	$3,301
1979	$2,583	$2,809	$2,742
1978	$1,929	$1,578	$1,907
Overall Average	$4,957	$4,928	$4,782

Used-car auction directory

SOUTH CAROLINA

Bruce Auto Auction & Recon Center—Fleet and Lease car and truck disposal our thing. AAA credit. 803-242-3090, Greenville, South Carolina.

SOUTH CAROLINA

Rawls Auto Auction — Since 1938. Pickup, delivery unlimited. Recon facilities. Sale every Tues., 11 A.M. 803-657-5111 or 657-7244, Leesville, South Carolina.

TEXAS

Fort Worth Auto Auction, 2245 Jacksboro Hwy., Ft. Worth, TX 76114. Sale every Thursday. Contact: Frank Post, 817-626-5494.

VIRGINIA

Since 1970
Jim Wheatley's
AA
Harrisonburg
Auto Auction
Exit 62 A I 81 P.O. Box 1086
Harrisonburg, Va. 22801-1086
(703) 434-5901-5

WASHINGTON

So. Seattle Auto Auction. The lease & Fleet Specialists. Bob McConkey, Jr., 1-800-872-6800. P.O. Box 5189, Kent, Washington 98064.

Carpenter's marks 92 years; Chevrolet deal since 1915

DURHAM, N.C.—Carpenter's Chevrolet, one of the oldest GM dealerships, will observe its 92nd anniversary in May by offering special anniversary prices on automobiles, trucks and used cars.

The company, which has been operated by five generations of Carpenters, was formed in 1893 by J.E. Carpenter and J.W. Carpenter and their father, Duane Carpenter. It sold groceries, wagons and buggies.

In 1910, the firm began to sell Metz automobiles and Kohler trucks from catalog pictures. Both of those lines were chain-driven similar to a present-day bicycle, and the Kohler truck was cranked from the side.

Between 1912 to 1915, the firm became the first Ford dealership and the first Dodge dealership in Durham. In 1915 it added Chevrolet.

During the years, the firm also handled Reo, Pullman, Oakland, Oldsmobile, Liberty and Elgin cars, company officials said.

In 1923, third-generation family member Marcus G. Carpenter moved the company to another downtown location.

Since 1955, the firm has been operated by Marcus G. Carpenter Jr., as president, and Fred G. Guthrie Jr., as vice president.

Recently, Marcus G. Carpenter III and Roy R. Wade, of the family's fifth generation, have joined the firm. Carpenter is sales manager and Wade is assistant general manager.

Company officials said, "The great-great grandsons of Duane Carpenter are now selling to some of the same families that started trading with the Carpenters when they sold wagons and buggies in 1893. Today, Carpenter's has six acres of modern downtown sales and service facilities."

Ketchum to handle Honda Acura ads

GARDENA, Calif.—American Honda has selected Ketchum Advertising to handle its Acura Automobile Division account effective May 1. Ketchum will open a Los Angeles office to service the $15 million Acura account.

Honda plans to launch the new line of "sporty, upscale performance" cars in April, 1986. The new line will have a separate dealer network, with distinct marketing and sales apparatus.

The 1986 Acura sales target is 45,000 units. Honda plans to appoint 150 Acura dealers by the end of next year with a total of 600 by 1990.

Sport Chevrolet participates in expo for disabled

SILVER SPRING, Md.—Sport Chevrolet will participate in the three-day 1985 Exhibition of the President's Committee on Employment of the Handicapped, May 1-3 at the Washington Hilton Hotel.

This is the second consecutive year that Sport Chevrolet has joined the exhibition, which is cosponsored by the Paralyzed Veterans of America and brings together 3,500 attendees and providers of all types of products and services for the disabled.

Those attending Sport's exhibit will be eligible to win a 40-channel CB receiver in a raffle.

As part of its services to the handicapped, the dealership offers a Directions Directory which includes information on suppliers and installers of adaptive equipment for the disabled.

Robb Henry, Sport Chevrolet salesman, heads a special sales group to provide expert service to disabled persons in the market for cars, vans and trucks that can be adapted to their special needs.

50th anniversary in Wisconsin

Leon A. Voegeli, center, Voegeli Chevrolet-Buick, Inc., Monticello, Wis., receives a 50-year-dealer award from Scott Bergstrom, left, organizational manager of Buick's Milwaukee zone, and Larry Shields, zone service manager.

movers and shakers

General Motors

Thomas H. Wyman, chairman of CBS, Inc., is a new member of the company-proposed slate of directors that will be voted on by shareholders at the General Motors annual meeting May 24.

Wyman joined CBS as chairman and chief executive in 1980 after serving with Pillsbury Co., Green Giant Co., Polaroid Corp. and Nestle Co.

John T. Connor and **John D. deButts** will retire from the GM board after the annual meeting. Both are 70. Connor was president and chief executive of Merck & Co. when he joined the GM board in 1964. He resigned in 1965 when he was appointed U.S. Secretary of Commerce, but returned in 1967 and has served continuously since then. He has been chairman of Schroders, Inc., since 1980.

DeButts has been a GM director since 1976. He was chairman and chief executive of American Telephone & Telegraph when he joined the GM board.

Oldsmobile

David E. Knecht has been appointed general service manager for Oldsmobile. He succeeds **Kenneth E. McCourt,** who has moved to the General Motors Customer Sales and Service Staff.

Richard C. Kuhn has replaced Knecht as assistant general service manager for the Western U.S. Kuhn formerly was Midwest regional service manager.

Knecht has been with Oldsmobile since 1965. He has held field service posts in Dallas and Houston and has been service manager of the Central region and assistant general service manager—East.

Kuhn has been with Oldsmobile since 1961. He has held service positions in the Houston, Charlotte (N.C.) and Detroit zones.

David E. Knecht

Richard C. Kuhn

Jimmie C. Anderson

Palmer E. Bunker

Jimmie C. Anderson has been appointed Kansas City zone manager for Oldsmobile. He succeeds **Charles E. Hebard Jr.,** who has retired.

Palmer E. Bunker replaces Anderson as Indianapolis zone manager. Bunker has been advertising manager for the division.

Anderson joined Oldsmobile in 1946 and has served in Lansing and in field assignments in Kansas City, Dallas and Memphis. He became Indianapolis zone manager in 1981.

Bunker was named advertising manager in 1982 after field posts in Atlanta, Detroit, Dallas and Houston. He has been with Oldsmobile since 1972.

Volkswagen of America

William A. Gelgota Jr. has been appointed manager of Volkswagen advertising for Volkswagen of America. He replaces **Michael V. Howe,** who resigned late in 1984 to join Chrysler-Plymouth as national advertising manager.

William A. Gelgota Jr.

Gelgota formerly was with J. Walter Thompson in Detroit as vice president, management supervisor for Ford Division car advertising. He has been in the advertising business since 1973.

Ford Motor Co.

Robert P. Sparvero has been named president of Ford Argentina, and **Richard E. Van House** has succeeded him as director of the business and product strategy office for Ford Asia-Pacific and Latin American Operations. Van House had been chief engineer, advance vehicle engineering and technology, with Ford's Car Engineering and Planning organization.

Sparvero joined Ford in 1964 and has served with the Finance Staff, Ford Division and the Product Development Group. He moved to Ford's International Automotive Operations and became director of the Business and Product Strategy Office in April, 1983.

Van House, with Ford since 1968, has served as programs manager for the 1983 Thunderbird and Cougar XR-7 and for luxury-car and Thunderbird. He was named executive director of luxury and mid-size car planning in 1982 and chief engineer, advanced vehicle engineering and technology, in 1983.

Automotive News World Outlook sees market loss for Big Three

Japan's role due to keep growing

Continued from Page 1

ger-car sales will rise by only about 7 percent from now until 1990, the analysis shows. Yet the Japanese makers' major focus will continue to be on North America where they will sell 3 million cars a year by 1991.

Honda will move ahead of the pack as the No. 1 seller of Japanese cars in the North American market. Honda's North American sales are expected to increase 56 percent to 711,000 units by 1991. About half will be built at Honda's Marysville (O.) plant.

Toyota Motor Co. sales in North America are expected to increase 10 percent to 673,000 units by 1991. Not included is the GM-Toyota production of the Nova, counted in GM figures.

Nissan will see North American sales up 20 percent to 660,000 units annually,including about 200,000 cars to be built each year at its Smyrna (Tenn.) plant.

Mazda will make substantial gains in North America. By 1991, Mazda will increase North American sales by 75 percent to 341,000 units, the study found. Mazda will build 240,000 cars at its plant in Flat Rock, Mich.

The other smaller Japanese makers, who have suffered the most from the U.S. trade restraints, are expected to make inroads in the North American market.

Subaru of America, the U.S. marketing and distributing arm of Fuji Heavy Industries, will gain 5 percent in North American sales. The company says it has no immediate plans to produce cars in the U.S.

Mitsubishi will enjoy a 20-percent rise in North American sales. Mitsubishi is planning a joint venture with Chrysler Corp. The plant, to be located in a yet undetermined location in the Midwest, will have capacity of 180,000 units per year, split evenly between the two companies.

Suzuki, which produces the Sprint for Chevrolet, will hit the 80,000-unit sales mark in North America by 1991. Suzuki sold 11,000 units in 1984, its first year in the North American market. In addition, Suzuki is considering building a plant in Canada.

Isuzu, which produces the Spectrum for Chevrolet, will see a North American sales gain of 500 to 600 percent to 141,000 units by 1991.

Across the Atlantic, the Japanese manufacturers are due to follow a similar trend in Western Europe, where trade barriers in some countries are far more stringent.

Nissan and Honda have been the leaders in Europe as they have been in North America, and announcements for European production by Toyota and Mazda are expected, said John Lawson, DRI's London-based economist.

Lawson said the Japanese companies apparently have chosen a strategy of working around trade barriers in the heavily restricted markets but potentially larger-volume markets of the U.K., Italy, Spain and France rather than trying for a greater share in the free markets or the relatively free but highly competitive West German market.

European production by Japanese companies will be up a minimum of 300,000 units by 1990 at 1.2 million cars a year, the World Outlook shows. However, it could go significantly higher, Lawson said.

Based on already announced plans, Nissan will build 100,000 cars in the U.K. and an undetermined number in Spain. In addition, Nissan has capacity of 50,000 units through its joint venture with Alfa Romeo in Italy.

Honda, meanwhile, has capactiy of 80,000 units at the Austin Rover plant in the U.K. In addition, Honda is jointly planning an executive car with BL.

"It has proven to be a fruitful relationship," Lawson said, "and another vehicle is being considered."

The financial weakness of the European makers could speed up joint ventures with Japanese companies. Europe's volume producers have lost money for the past five years. Last year's losses were even larger than the previous year's. This year is expected to be another losing one, though the losses will be narrowed, Lawson said.

At the same time, contemplation of emission control legislation like that in the U.S. has triggered the need for massive capital investment in new technology. The Japanese companies have the emission control technology from their experience in the U.S. market, giving them a competitive edge and better positioning them for joint ventures.

"The volume European manufacturers are so financially weak there is no way they can recover those investment costs," Lawson said.

Diesel engines are becoming increasingly popular in Europe and the Japanese have good diesel technology, Lawson added.

At home, the Japanese auto makers will enjoy some sales increases though not dramatic, growing at a rate of 2 percent annually.

Importers to Japan will fare no better than they have in the past, the World Outlook said. Only Western European makers will see minimal rises with Volkswagen continuing to be the market leader.

For the rest of the world, the Japanese companies, which have been the leaders particularly in Third World production, will see sales in those countries increase by about 200,000 units to a total of 1.1 million units by 1991.

JAPANESE CAR MANUFACTURERS' PRODUCTION & SALES PROJECTIONS

Units in Thousands

	1984	1986	1990
TOYOTA TOTAL PRODUCTION	2,413	2,474	2,561
Domestic Sales	1,275	1,337	1,388
Sales to North America	626	630	654
Sales to Europe	228	237	250
Sales to Rest of World	258	270	269
NISSAN TOTAL PRODUCTION	1,846	1,935	2,018
Domestic Sales	805	894	932
Sales to North America	529	600	642
Sales to Europe	287	293	314
Sales to Rest of World	194	202	201
HONDA TOTAL PRODUCTION	844	950	941
Domestic Sales	246	263	274
Sales to North America	580	635	691
Sales to Europe	115	120	132
Sales to Rest of World	75	77	79
MAZDA TOTAL PRODUCTION	764	889	904
Domestic Sales	215	252	264
Sales to North America	192	197	332
Sales to Europe	200	209	226
Sales to Rest of World	176	201	203
MITSUBISHI TOTAL PRODUCTION	548	606	654
Domestic Sales	198	232	259
Sales to North America	143	161	173
Sales to Europe	111	118	128
Sales to Rest of World	83	85	85
SUBARU TOTAL PRODUCTION	243	261	275
Domestic Sales	88	95	98
Sales to North America	167	163	169
Sales to Europe	31	32	33
Sales to Rest of World	39	45	48
SUZUKI TOTAL PRODUCTION	164	234	258
Domestic Sales	77	90	94
Sales to North America	11	62	78
Sales to Europe	43	44	47
Sales to Rest of World	27	28	30
DAIHATSU TOTAL PRODUCTION	162	184	199
Domestic Sales	107	108	119
Sales to North America	0	0	0
Sales to Europe	24	29	31
Sales to Rest of World	30	32	34
ISUZU TOTAL PRODUCTION	89	200	258
Domestic Sales	41	64	66
Sales to North America	19	87	137
Sales to Europe	4	5	5
Sales to Rest of World	27	35	40
TOTAL JAPANESE PRODUCTION	7,073	7,735	8,069

Historical Data Source: Japan Automobile Manufacturers Assn.

Notes: 'Sales to North America' for Honda, Nissan and Mazda include cars produced in the U.S., but U.S. sourcing is netted out of total production; GM-Toyota (NUMMI) is counted under GM.
Production includes only domestic production, not international sourcing.
Source: DRI International Automotive Services.

Court refuses dealers' bid to halt credit-union sales

By Matt DeLorenzo
Los Angeles Reporter

LOS ANGELES.—A Superior Court judge has refused to grant an injunction sought by the Motor Car Dealers Assn. of Southern California to stop several credit union sales of new cars.

Saying that the Department of Motor Vehicles has closed the loophole that allowed the sales in the first place, Judge John Cole ruled against the dealers and paved the way for several more sales under conditions provided by the DMV.

The dispute has grown out of a provision in the DMV code that allows the issuance of temporary branch permits for the sale of new cars. Dealers have used the permits in the past to sell cars at special events such as auto shows.

Recently, a number of companies have obtained the permits to conduct one-day or two-day sales on behalf of credit unions and their members. The companies buy cars near invoice from franchised new-car dealers, truck them to the sale site and price them at or below the Manufacturer's Suggested Retail Price. The credit union arranges the car loans for its members at the sale.

One such company, Autoland, is a licensed used-car dealership. It was that company's April 27 sale at the Hollywood Bowl that the car dealers were trying to stop when the suit was filed against the DMV for granting Autoland a temporary branch permit.

Last month, the DMV ruled that it would no longer issue the temporary branch permits to parties other than new-car dealers. However, the DMV also ruled that it would issue permits to those companies which obtained them in the past and had already invested money in upcoming sales.

Autoland's March 30 sale in San Diego was held under that provision and an earlier attempt by the dealer group to stop that show with an injunction also failed.

Judge Cole's decision against the dealers will also allow Brown & Clarkson of Northern California to go ahead with its sale in early May in Oakland. However, after those last several sales, it's not clear if those companies can show sufficient investment to continue the practice.

Judge Cole said the case was "easy to decide" and added that he saw it as "equal wrong on both sides." He added that the "problem should be resolved on the legislative or administrative level," and he said he felt the DMV has taken adequate steps to correct the code and enforce it as it was originally promulgated.

AUTOMOTIVE NEWS WORLD OUTLOOK

Generated by Data Resources Inc.

(In Millions)

	1983	1984	1985	1986	1987	1988	1989	1990
NEW CAR REGISTRATIONS								
Total Western Europe*	10,469	10,163	10,079	10,594	10,766	10,930	11,064	11,261
Germany	2,427	2,394	2,255	2,536	2,504	2,572	2,650	2,697
France	2,018	1,758	1,840	1,936	1,980	2,019	1,968	2,045
United Kingdom	1,792	1,750	1,698	1,732	1,773	1,715	1,771	1,802
Italy	1,581	1,636	1,672	1,635	1,686	1,736	1,757	1,722
Total U.S.	9,178	10,330	10,810	10,580	10,980	11,170	11,350	11,620
Asia-Pacific**	1,025	1,137	1,240	1,314	1,372	1,409	1,495	1,568
Japan	3,136	3,096	3,231	3,385	3,320	3,398	3,459	3,550
Total Africa-MidEast	1,271	1,242	1,305	1,450	1,575	1,635	1,603	1,645
Total Latin America	1,401	1,350	1,457	1,517	1,580	1,762	1,949	2,068
Total Eastern Bloc	2,085	2,118	2,155	2,222	2,302	2,366	2,407	2,457
CAR PRODUCTION								
Total Western Europe*	11,121	10,726	10,816	11,253	11,499	11,700	11,809	12,089
Germany	3,878	3,790	3,683	3,924	3,942	4,043	4,121	4,212
France	2,961	2,713	2,728	2,847	2,968	3,027	2,997	3,006
United Kingdom	1,045	909	987	997	1,022	992	1,018	1,094
Italy	1,396	1,439	1,435	1,416	1,439	1,478	1,499	1,516
Total North American	7,746	8,894	8,786	8,435	8,264	8,600	8,660	8,806
Asia-Pacific**	7,911	7,969	8,392	8,860	8,981	9,078	9,298	9,501
Japan	7,152	7,073	7,380	7,735	7,736	7,761	7,906	8,069
Total Latin America	1,113	1,082	1,236	1,346	1,467	1,681	1,831	1,944
Mexico	207	245	297	342	387	463	495	518
NEW TRUCK REGISTRATIONS								
Western Europe***	1,139	1,117	1,152	1,192	1,196	1,220	1,242	1,263
U.S.	3,161	4,092	4,680	4,710	4,860	4,990	5,080	5,140
TRUCK PRODUCTION								
Western Europe***	1,307	1,224	1,294	1,341	1,353	1,390	1,423	1,446
North America	2,971	3,958	4,276	4,245	4,459	4,510	4,586	4,612

*Includes Germany, France, United Kingdom, Italy, Netherlands, Belgium, Denmark, Ireland, Greece, Sweden, Norway, Finland, Switzerland, Austria, Spain and Portugal.
**Includes Taiwan, South Korea Peninsular Malaysia, India, Australia and New Zealand but excludes Japan, which is listed separately.
***Includes Germany, France, United Kingdom, Italy, Spain, Sweden, Netherlands and Belgium.

Right in line with top week of 1984

Makers schedule 188,167 cars

By Louise Kertesz
Detroit Reporter

Scheduling production at the high levels of the final weeks of 1984, U.S. auto makers last week continued to aim for the best weekly output so far this year.

The targeted build of 188,167 cars last week topped the 185,788 for the week ended March 30 and was 1,831 under the best weekly output for 1984: 189,998 for the week ended Dec. 15.

Last week's estimated output was 2.45 percent better than the previous week's 183,669 and 9.19 percent more than the year-ago week's 172,329.

The prior week's actual production fell some 2,000 cars short of target.

Year-to-date, 2,876,528 cars have been assembled, 1.91 percent ahead of the 2,822,648 completed last year at this point.

Companies shared last week's targeted build as follows: General Motors, 57.59 percent; Ford Motor Co., 20.57 percent; Chrysler Corp., 16.53 percent; American Motors, 1.94 percent; American Honda, 1.76 percent; Volkswagen of America, 1.06 percent; Nissan Motor Mfg. Co., U.S.A., 0.31 percent, and New United Motor Mfg. Co., 0.24 percent.

Honda lost two hours of production during the week ended April 20 due to a power shortage.

Four hours of daily overtime was scheduled last week at Honda's plant in Marysville, O.

General Motors scheduled two overtime shifts Saturday (April 27) at the following plants: Pontiac G; Detroit; Arlington, Tex.; Framingham, Mass.; Lakewood, Ga., and Wilmington, Del.

Chrysler scheduled two overtime shifts Saturday at its plant in Belvidere, Ill.

Chrysler plants in Belvidere, Newark (Del.) and St. Louis are scheduled to work two nine-hour daily shifts this week (April 29).

Chrysler's Jefferson (Detroit) plant will work two 8½-hour daily shifts this week.

Ford's Lorain (O.) plant worked overtime Saturday.

Ford has slated daily overtime this week at its plants in Atlanta; Chicago; Lorain, O.; Dearborn; Wixom, Mich.; Edison, N.J.; Wayne, Mich., and Kansas City.

Overtime is planned at Ford's Dearborn plant Saturday, May 4.

Tippett gives up his job as full-time AMC chairman

Continued from Page 3

the cost of the Canadian plant and launch it sooner.

Despite AMC's dismal performance in the first quarter and Renault's troubles at home, Dedeurwaerder reiterated Renault's continued commitment to AMC and the North American market.

He read a letter from Renault's new chief executive officer, Georges Besse, which said: " . . . the intentions of Renault expressed in this letter remain unchanged and I intend—despite Renault's difficulties—that we continue our long-term program with you."

Renault, which holds a 46-percent stake in AMC, also reported a loss last week. For 1984, Renault lost $1.35 billion compared with a loss of $170 million in the previous year, despite a 6-percent increase of sales at $12.67 billion.

It has been speculated that Renault would back away from its AMC partnership to tend to problems at home.

Dedeurwaerder also denied rumors that AMC planned to sell its profitable Jeep division. "We will not sell Jeep," he said emphatically.

Dedeurwaerder defended the company's reactions to worker sabotage at the Jeep plant in Toledo. He said that a few workers cannot "play with the future of all the workers . . . 99 percent of the workers are responsible workers, and we are not going to give up from the pressure of a couple."

In response to the sabotage, AMC filed a lawsuit against the UAW and its Toledo leadership seeking restitution for the $300,000 worth of damage. The workers are protesting the company's means of repaying them for their investment during the recession.

Dedeurwaerder also stood tough on the situation at the Alliance/Encore assembly plant in Kenosha. The company has threatened to close the plant if it doesn't win concessions from workers there.

"If we are competitive with the rest of the industry, we have no reason to close the Wisconsin plant," he said. "If we are not, then we do have a problem. And the union knows what competitive is. They know what they have to do."

Dedeurwaerder said a competitive contract means not only being competitive with General Motors and Ford Motor Co. but competitive with Mazda and Toyota and their auto-making operations in the U.S.

Truck production declines a bit from year's high

Domestic makers scheduled production of 69,067 trucks last week, down 2.63 percent from the previous week's 70,932.

The prior week's build topped the 70,825 for the week ended April 13, the former 1985 high, and was the highest weekly production since June, 1979.

Last week's targeted output was 5.58 percent more than the year-ago week's 65,416.

So far this year, 1,121,905 trucks have been assembled, 7.31 percent more than the 1,045,502 built last year at this point.

General Motors scheduled two overtime shifts Saturday (April 27) at its plants in Flint (Nos. 1 and 2); St. Louis; Janesville, Wis., and Pontiac (No. 2).

GM's Baltimore plant worked one overtime shift Saturday.

Ford Motor Co. scheduled daily overtime this week (April 29) at the following plants: Wayne, Mich.; Kansas City; Lorain, O; Norfolk; Twin Cities, and Louisville.

Overtime Saturday (May 4) is scheduled at Ford plants in Kansas City and Norfolk.

Chrysler Corp.'s Warren (Mich.) plant is scheduled to operate two nine-hour daily shifts this week.

Canada sights another peak for 1985 output

For the third consecutive week, Canadian auto makers scheduled their highest weekly production of the year.

Estimated output of 24,328 cars last week was 4.91 percent better than the previous week's 23,190 and 3.65 percent more than the year-ago week's 23,471.

The 23,190 was the highest total of 1985, topping the week ended Jan. 12, when 23,068 cars were assembled.

So far this year, 330,077 cars have been assembled, 12.18 percent less than the 376,270 completed last year at this point.

Truck makers scheduled 20,073 units last week, about the same as (down 0.46 percent) the previous week's 20,166, which topped 20,000 for the first time ever.

Last week's estimate was 11.96 percent more than the year-ago week's 17,928.

Year-to-date, 300,577 trucks have been built, 6.90 percent more than the 281,183 assembled last year at this time.

Chrysler Corp.'s Windsor (Ont.) plant scheduled 2,670 Plymouth Voyagers, 2,826 Dodge Caravans and 612 Mini Ram Vans last week, bringing the T-115 total for the year to 96,124.

CANADIAN CAR PRODUCTION

	Week Ended April 27, 1985	Week Ended April 28, 1984	Week Ended April 20, 1985	April to Date	Jan. 1 to April 28, 1984	Jan. 1 to April 27, 1985
AMERICAN MOTORS	400	0	411	1,146	8,120	3,898
FORD MOTOR	10,368	9,619	10,121	36,988	140,493	164,020
GENERAL MOTORS	13,335	13,627	12,433	47,086	223,962	158,520
VOLVO	225	225	225	855	3,695	3,639
Total Cars, Canada	24,328	23,471	23,190	86,075	376,270	330,077

TRUCK PRODUCTION IN U.S.☆

	Week Ended April 27, 1985	Week Ended April 28, 1984	Week Ended April 20, 1985	April to Date	Jan. 1 to April 28, 1984	Jan. 1 to April 27, 1985
CHEVROLET	21,067	19,746	23,849	86,589	332,307	378,712
DODGE	4,600	4,279	4,579	17,529	69,503	68,653
FORD	26,377	26,865	26,838	100,699	399,452	400,152
GMC	7,898	6,848	7,456	28,403	107,133	114,039
INTERNATIONAL	1,660	1,769	1,756	6,502	24,509	26,793
JEEP	4,400	2,974	3,355	13,714	63,316	65,860
NISSAN	1,295	1,865	1,329	5,413	30,792	36,160
AM GENERAL	50	50	50	190	890	820
MISCELLANEOUS	1,720	1,000	1,720	6,536	17,600	30,716
Total Trucks, U.S.	69,067	65,416	70,932	265,575	1,045,502	1,121,905

CANADIAN TRUCK PRODUCTION

	Week Ended April 27, 1985	Week Ended April 28, 1984	Week Ended April 20, 1985	April to Date	Jan. 1 to April 28, 1984	Jan. 1 to April 27, 1985
CHRYSLER	8,760	8,107	8,962	32,592	119,101	139,316
FORD	4,800	3,410	4,682	16,121	54,418	59,582
GENERAL MOTORS	6,248	6,257	6,256	23,069	105,301	97,706
INTERNATIONAL	265	154	266	967	2,363	3,973
Total Trucks, Canada	20,073	17,928	20,166	72,749	281,183	300,577
N. American Trucks	89,140	83,344	91,098	338,324	1,326,685	1,422,482

☆—Now includes window van production. *—Estimated.
Jeep includes commercial only. AM General includes government-destined vehicles.
Miscellaneous includes estimates for Mack, Volvo-White, Kenworth, Peterbilt, Freightliner, Mercedes-Benz, etc.
Monthly estimates may contain error of one or two units due to rounding.

U.S. CAR PRODUCTION

	Week Ended April 27, 1985	Week Ended April 28, 1984	Week Ended April 20, 1985	April to Date	Jan. 1 to April 28, 1984	Jan. 1 to April 27, 1985
AMERICAN MOTORS	3,650	0	3,650	7,300	64,257	32,819
Renault Total	3,650	0	3,650	7,300	64,257	32,819
Alliance	2,150	0	2,161	4,311	34,518	19,373
Encore	1,500	0	1,489	2,989	29,739	13,446
CHRYSLER CORP.	31,100	30,001	30,100	117,051	442,505	452,400
Plymouth Total	9,200	9,106	8,675	34,762	131,582	132,236
Horizon	3,500	3,627	3,000	12,574	53,475	46,256
Reliant	4,400	4,684	4,365	16,578	69,039	60,536
Caravelle	900	297	938	3,972	3,039	19,030
Gran Fury	400	498	372	1,638	6,029	6,414
Chrysler Total	9,400	10,518	9,435	35,924	147,108	149,416
LeBaron	2,000	3,292	2,005	7,966	43,765	38,016
LeBaron GTS	2,500	0	2,480	9,201	0	29,929
Laser	1,200	1,595	1,237	4,412	26,673	17,184
New Yorker/E-Class	1,500	2,644	1,475	5,876	36,921	24,759
Fifth Avenue	2,200	2,987	2,238	8,469	39,749	39,528
Dodge Total	12,500	10,377	11,990	46,365	163,815	170,748
Omni	3,600	3,363	3,159	12,944	49,721	49,074
Aries	3,600	3,160	3,583	13,657	54,223	47,623
Daytona	1,000	1,252	991	3,740	20,976	15,246
Dodge 600	1,400	1,877	1,383	5,492	28,461	24,642
Lancer	1,900	0	1,877	7,080	0	22,671
Diplomat	1,000	725	997	3,442	10,434	11,492
FORD MOTOR	38,700	41,257	36,097	140,457	591,977	593,642
Ford Division	25,647	25,830	23,594	93,867	386,724	392,330
Escort	7,878	8,050	7,139	27,872	119,486	103,120
Mustang	3,064	3,125	2,831	12,750	43,237	59,110
LTD	6,116	4,174	6,106	23,173	78,643	83,050
Thunderbird	4,577	3,313	3,396	14,574	54,889	72,815
Crown Victoria	0	1,586	0	0	27,561	7,122
EXP	0	646	0	0	11,149	3,838
Tempo	4,012	4,936	4,122	15,498	51,759	63,275
L-M Division	13,053	15,427	12,503	46,590	204,353	201,312
Mercury Total	9,553	11,269	8,993	33,254	147,890	144,082
Lynx	2,558	1,807	1,924	6,156	24,486	24,963
Capri	398	556	397	1,289	6,051	6,611
Marquis	2,978	3,076	2,944	11,299	36,035	40,688
Cougar	2,481	2,717	2,702	10,458	34,726	46,749
Grand Marquis	0	2,038	0	0	31,341	4,733
Topaz	1,138	1,075	1,026	4,052	15,251	20,338
Lincoln Total	3,500	4,158	3,510	13,336	56,463	57,230
Continental	631	1,098	633	2,412	11,132	10,367
Lincoln	2,479	2,600	2,487	9,448	32,115	40,538
Mark VI/VII	390	460	390	1,476	13,216	6,325
GENERAL MOTORS	108,371	95,215	107,945	403,725	1,645,628	1,705,378
Buick Total	23,614	20,940	24,644	89,175	349,814	334,987
Skylark	2,385	2,136	2,460	9,206	32,692	39,209
Skyhawk	2,074	3,187	2,740	8,428	56,500	35,511
Somerset Regal	2,920	0	2,410	10,711	0	43,598
Century	6,420	4,805	6,745	23,833	76,903	78,723
Regal	2,968	4,817	2,981	10,336	76,737	37,091
LeSabre/Electra(rwd)	3,122	3,812	3,554	12,867	80,106	47,063
Riviera	1,718	900	1,393	5,416	19,085	22,158
Electra(fwd)	2,007	1,283	2,361	8,378	7,791	31,634
Cadillac Total	7,915	5,907	7,353	28,816	118,042	128,979
Cimarron	576	368	583	2,104	6,859	9,850
Seville	961	888	784	3,290	14,248	14,614
Eldorado	1,790	1,688	1,468	6,147	26,304	27,001
Cadillac (rwd)	1,284	1,766	1,288	4,799	62,079	18,907
DeVille (fwd)	3,304	1,197	3,230	12,476	8,552	58,607
Chevrolet Total	34,486	34,643	36,309	131,272	564,673	593,807
Chevette	3,627	6,039	3,307	12,404	79,515	53,945
Cavalier	9,360	8,431	11,374	37,571	141,453	164,392
Celebrity	5,757	6,817	6,206	22,886	101,495	99,192
Camaro	4,942	5,720	4,955	18,719	90,182	78,361
Citation	1,615	2,496	1,606	6,162	37,630	27,491
Malibu/El Camino	0	734	0	0	11,776	0
Monte Carlo	3,848	1,165	3,254	13,612	51,397	54,621
Chevrolet	4,337	2,619	4,759	16,299	39,735	101,257
Corvette	1,000	622	848	3,619	11,490	14,548
Oldsmobile Total	27,682	22,828	24,974	99,878	415,387	428,288
Omega	0	1,155	0	0	18,365	0
Firenza	1,500	1,702	1,600	5,876	26,082	25,767
Cutlass Supreme	5,065	4,484	4,649	18,302	120,462	71,402
Cutlass Ciera	7,936	6,728	6,414	27,474	93,735	130,025
88/96 (rwd)	5,627	6,545	5,448	20,133	132,438	81,567
Olds 98 (fwd)	2,962	1,249	2,996	11,433	8,644	48,712
Calais	3,705	0	3,238	13,431	0	55,182
Toronado	887	965	629	3,229	15,661	15,633
Pontiac Total	14,674	10,897	14,665	54,584	197,712	219,317
Acadian**	0	777	234	717	7,066	4,826
2000 Sunbird	2,715	3,188	3,150	10,608	49,040	46,424
1000	422	1,196	559	1,661	15,286	10,549
Firebird	2,678	2,301	2,565	9,848	38,069	42,077
Phoenix	0	470	0	0	5,783	0
6000	1,530	0	1,479	4,757	0	11,952
Grand Prix/Bonneville	0	0	0	0	29,733	0
Parisienne	1,119	287	1,307	4,641	11,317	22,881
Fiero	2,640	2,678	2,648	10,512	41,418	38,570
Grand Am	3,570	0	2,713	11,840	0	42,038
HONDA	3,306	3,373	2,904	12,528	40,145	54,764
NISSAN	585	0	510	1,684	0	2,080
NUMMI (Nova)*	455	0	400	1,405	0	2,605
VOLKSWAGEN	2,000	2,483	2,063	7,579	39,036	32,840
Total Cars, U.S.	188,167	172,329	183,669	691,729	2,822,648	2,876,528
Total Cars, Canada	24,328	23,471	23,190	86,075	376,270	330,077
N. American Cars	212,495	195,800	206,859	777,804	3,198,918	3,206,605
N. American Trucks	89,140	83,344	91,098	338,324	1,326,685	1,422,482
North American Cars and Trucks	301,635	279,144	297,957	1,116,128	4,525,603	4,629,087

*—Revised estimate.
**—All Acadians are built for sale in Canada.
Monthly estimates may contain error of one or two units due to rounding.

Automotive News®

October 28, 1985
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4 Japanese makes lead sales-per-dealer ranking

By Jenny L. King
Detroit Reporter

The new-car sales-per-dealer story, freckled with averages and percentages, may be difficult to integrate, but the essence of it is: A profitable livelihood for most franchise holders. Especially those with import lines. And even more so for those with trucks as well as cars.

First-half figures included domestic car sales up about 2 percent, import sales up 7 percent, record overall truck sales, the domestic dealer population stable but down a bit and import dealers up nearly 25 percent due to the addition of Chevrolet import and Merkur outlets.

Combining car and truck sales brought some hefty numbers for many makes. Mitsubishi led the pack with an average of 432 sales per outlet in the first half, followed by Toyota at 403 and Nissan at 350. In fourth place was Honda, 334, which has no trucks to boost its figures.

Chevrolet led the domestics with 290 car-truck sales per dealer, and Ford was close behind with 288.

Dealers with domestic car franchises averaged 207 sales per outlet January through June, 1985, up slightly from 204. Import dealers had a 94-per-outlet car average for the first half, down from 117 a year earlier. The new-car dealer average figured to 228 this year compared with the year-ago 221.

With domestic-car sales beginning to stall out at the end of the first half, there were no U.S. makes with record averages per franchise. Imports were another story. Accompanying record sales for many lines were best-ever averages. Honda, Volvo, Mercedes-Benz, BMW and Saab dealers notched sales-per-outlet records. So did Alfa Romeo, Jaguar, Isuzu and Mitsubishi dealers.

It was a mixed bag for the major U.S. auto makers during the first half. General Motors' domestic-car sales-per-dealer average slipped to 245 from 251 a year earlier. Ford Motor Co. was up to 195 from 183. Chrysler dealers turned in an impressive 151 domestic average, up from 131 in 1984.

American Motors, including AMC Eagles plus domestic and imported Renault passenger cars, slid to 46 per outlet from a healthier year-ago 68. Volkswagen, likewise including imported models with domestic new cars, was up to an outlet average of 121 from 115.

In addition to the long-time Automotive News New-Car Sales per Outlet By Make chart, a combined car/light-truck sales per dealer profile shows the larger sales (and profits) picture. It is planned to add the table to this semi-annual accounting.

The car truck listing includes pickups imported by Mitsubishi, Toyota, Nissan, Mazda, Isuzu and

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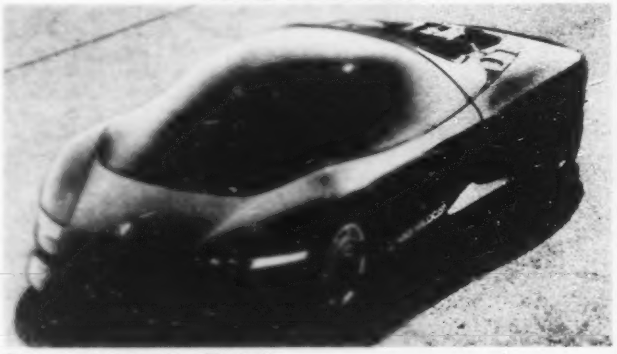
Wild Wildcat



Concept car for Buick

Wildcat, Buick's latest experimental car, may not be as far-out as it appears. GM insiders say it's a test bed of several forward projects at GM that will be showing up on production cars in the near future. Story, another picture are on Page 2.

New 3-year labor pact carries $1 billion price tag

Chrysler plants due to reopen

By Mary Connelly
Detroit Reporter

UAW members at Chrysler Corp. plants in the U.S. were expected to return to work today (Oct. 28). The ratification vote on a new three-year contract carrying a $1 billion price tag was held during the weekend.

In Canada, union members went back to their jobs Oct. 21 after settling their five-day strike.

UAW President Owen Bieber said he was "confident" union members would ratify the proposed agreement reached after a 12-day strike which company officials said cost Chrysler $17 million daily. The ratification vote was scheduled following overwhelming approval last Thursday by the 170-member National UAW-Chrysler Council. The strike idled 70,000 Chrysler workers in the U.S.

The proposed pact met the UAW goal of providing Chrysler workers wage and benefit parity with UAW members at General Motors and Ford Motor Co. and, in fact, offered "parity plus," Bieber said.

Assuming a 4 percent annual inflation rate, a total of $5,650 will be added to the typical Chrysler worker's regular earnings over the 35 months of the proposed agreement, according to the UAW. An additional $4,400 or more will be gained through various scheduled bonus and profit-sharing payments.

Under the terms of the agreement, Chrysler workers will receive a $2,120 bonus in acknowledgement of the concessions made

Please turn to Page 8, Col. 1

breaking news

Nissan-designed Taiwanese car coming to U.S.

TOKYO.—Nissan Motor Co. said that Yue Loong Motor Co., the Taiwanese auto maker in which Nissan has a 25-percent share, will begin exporting a Nissan-designed car to the U.S. in 1988. The one-liter car will be called March.

GM pays $28 million to consumers

DETROIT.—General Motors paid $27,952,000 to 75,458 consumers during the first 13 months of a nationwide, Better Business Bureau-sponsored mediation/arbitration program, according to the FTC. GM set up the program in conjunction with the BBB under an FTC consent order. The federal agency

See BREAKING NEWS, Page 8, Col. 4

Toyota near decision on U.S. plant site

TOKYO.—Toyota Motor Corp.'s process of selecting sites for its plants in the U.S. and Canada is proceeding full speed ahead and the final decisions will be made "before the end of the year, if not sooner," according to Kaneyoshi Kusunoki, executive vice president and chairman of the site committee.

"The sooner the better," Kusunoki said, "If the decision is delayed, it will take that much longer to complete the construction project."

Kusunoki heads Toyota's North America Project Office (NAPO) which is in charge of the U.S. and Canada plant project and is overseeing site selection, plant construction and local operation.

The U.S. plant will produce 2,000-cc passenger cars at an annual rate of 200,000 units beginning in autumn, 1988. The Canadian plant will have an annual capacity of 50,000 units and will begin producing 1,600-cc Corolla-type models also beginning in 1988.

Kusunoki said Toyota has presented its requirements for plant sites to officials in the U.S. and Canada who have expressed an interest in having the plant located in their areas and has asked them for information regarding the available sites.

Kusunoki said Toyota has received the information and the NAPO is analyzing the replies.

Important factors under consideration, Kusunoki said, include: Having parts vendors close by; the distance vendors have to transport their goods; location of the site in relation to markets for the product; availability of highways and railroads for transporting the finished product; population of the community, and availability of utilities, such as gas, water and electricity.

Kusunoki said it is not brick and mortar but the production line that is important in a plant.

In that sense, he said he would like to pattern the U.S. plant after Toyota's Tsutsumi plant in Toyota City because it has the newest production lines, although it is approximately nine years older than the auto maker's newest facility, the Tahara plant, which went into operation in 1979.

"Because we have had a lot of model changes in the last three or four years, we have improved the various production lines," he said. "Just because a plant is the newest doesn't mean it has the most modern production lines."

Kusunoki noted that the Tsutsumi plant manufactures mainly 2,000-cc passenger cars (Camry,

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McGill joins staff; Hamilton promoted

Automotive News editors realigned

A top-level realignment of the Automotive News editorial staff has been announced by Keith E. Crain, publisher and editorial director.

Andrew R. McGill, 38, has been appointed editor, and Kathleen M. Hamilton, 33, has been promoted to managing editor. Both appointments are effective Dec. 1.

McGill succeeds Robert M. Lienert, 59, who has been named editor-at-large, and Hamilton succeeds John K. Teahen Jr., 60, who has been appointed senior editor. Both positions are newly created. Lienert and Teahen have a combined 63 years of service at Automotive News.

McGill currently is business-finance editor and assistant to the managing editor of the Detroit News. He joined the News in 1977 after five years at the Miami Herald, where he reported on business and real estate prior to becoming business-finance editor. He previously worked five years as a reporter and editor for United Press International in Detroit, Chicago and Western Europe.

At the Detroit News, McGill planned and edited the 1982 series GM: A Profile, which won the John Hancock Award for Excellence in Business and Economic Journalism. McGill also reported and wrote an award-winning 1977 study of community power and influence in Southeastern Michigan and a 1985 study of the long-term economic future of the region.

As editor of Automotive News, McGill will be the chief news officer of the paper and will oversee news coverage and presentation and help formulate editorial policies, directing a staff of 26 full-time editors and reporters—including those assigned to permanent bureaus in Tokyo, London, Washington, New York and Los Angeles.

In his new position, Lienert will be involved in a variety of special projects and will assist in staff direction.

Teahen will be in charge of the news editing operation and will

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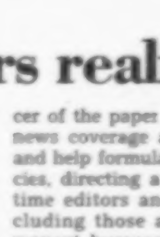
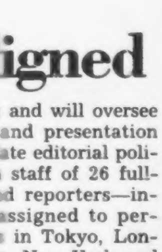
Andrew R. McGill

Kathleen M. Hamilton



Robert M. Lienert



John K. Teahen Jr.

For third quarter

GM profit up 24 pct.; operations show loss

By Michelle Krebs
Financial Editor

General Motors reported a 24-percent increase in third-quarter earnings on record sales. However, GM showed a $20.9 million operating loss due to costly financing incentives offered during the period.

Sales for the quarter set a third-quarter record of $22.5 billion, up 21 percent from $18.5 billion in the third quarter of 1984. GM's best-ever sales quarter was the second quarter of this year when sales hit $25.1 billion.

Net income for the third quarter amounted to $516.5 million, or $1.46 per share, ahead of the $416.8 million, or $1.31 per share, earned in the same quarter a year ago.

The quarterly profit represented GM's second-best third quarter ever. The third quarter of 1983, in which GM earned $736.9 million, was GM's best-ever third quarter.

GM said its overall earnings were favorably affected by record earnings of General Motors Acceptance Corp., which amounted to $266 million; Electronic Data Systems' non-GM earnings reaching $51.9 million; investment tax credits amounting to $172 million, and gains from a weaker dollar.

However, GM said those factors were offset by costs related to its incentive campaign used during the quarter to stimulate U.S. car and truck sales. GM offered 7.7-percent financing following the summer strike by the Teamsters Union car haulers.

"The special financing program did reduce earnings," GM Chairman Roger B. Smith and President F. James McDonald said, "but it provided exactly what was needed to enable GM dealers to clear out most of the '85-model cars and light trucks prior to our 1986 model introductions."

Again in the third quarter as throughout the year, GM said earnings continued to be adversely impacted by costs relating to new models and facilities "required for GM to remain competitive."

For the nine months ended Sept. 30, GM earned $2.7 billion, or $8.24 per share, down 25 percent from 1984's record of $3.6 billion, or $11.51 per share, for the first nine months.

Sales for the first nine months this year set a record of $71.7 billion, up 14 percent from $63.0 billion in 1984's first nine months.

Worldwide factory sales to GM dealers hit a record 2,150,000 units for the third quarter, up 20 percent from the year earlier.

For the first nine months, worldwide factory sales set a new record of 6,975,000 units, up 12 percent from the previous year.

Smith and McDonald said the U.S. car and truck industry will surpass the 15-million unit level that they have projected for the 1985 calendar year.

"Model-year retail sales were extremely strong, and most signs indicate that the economy is fundamentally sound. That is good news for both the consumer and the auto industry," they said.

GM continues on track for a record-breaking year in terms of dollar sales. GM sales in 1984 hold the record with $83.9 billion. Sales for this year may well be over $90 billion.

At the same time, the average of analysts' forecasts shows GM will earn close to $3.70 billion in 1985. GM earned a record $4.52 billion in 1984 and $3.73 billion in 1983.

Honda introduces first luxury car

Honda Motor Co. has unveiled its first luxury sedan, the Legend, which is powered by 2.0-liter and 2.5-liter engines. The car goes on sale in Japan Nov. 23 with prices of $11,569 for the 2.0-liter ZI model and $14,625 for the 2.5-liter XI. The car was developed jointly with the Austin Rover Group and will be sold in the U.S. starting next April.

Honda's V-6 Legend enters luxury segment

By Francis J. Gawronski
Tokyo Bureau Chief

TOKYO.—Honda Motor Co. has entered the luxury segment of the auto market for the first time with its new Legend, a top-of-the-line sedan featuring a 24-valve 2.0-liter V-6 engine.

The Legend will go on sale here Nov. 23, with a sales target of 1,500 monthly, and in the U.S. next April. It was developed jointly with the Austin Rover Group (ARG), of Great Britain.

Tadashi Kume, Honda president, said the firm expects to sell 20,000 to 30,000 units in the first year in the U.S. market, where it will be part of the Acura line.

ARG will build the car for sale throughout Europe, as well as in the U.K. ARG exports to the U.S. will begin early in 1987. In addition to producing the Legend for sale in Japan and the U.S., Honda will export the car to Asian countries, and will build the ARG version of the car for sale in Japan and Australia.

Kume said the car offers the best aerodynamics of any four-door sedan and will create a new market for Honda, which has previously specialized in small cars and motorcycles.

The Legend will sell in the Tokyo area for $11,569 for the 2-liter ZI model and $14,625 for the 2.5-liter XI model. Reportedly, the car will be priced between $18,000 and $20,000 in the U.S.

In styling, the Legend features a wedge-shaped profile with a low nose and high trunk that retains the recent Honda styling practice. However, the distinctive nose includes a central radiator grille flanked by slim-line contoured flush headlamps, each incorporating two halogen units. Below the grille and lamps is a large integral bumper and spoiler.

The rear-end treatment resembles the styling of the Prelude, with a horizontal design motif and a central plastic embellishment panel across the lower edge of the trunk lid, which opens virtually down to the bumper level.

Further aerodynamic details,

Please turn to Page 6, Col. 1

Finds 86 pct. in compliance with Regulation Z

FTC checks dealers on credit ads

By Jake Kelderman
Washington Reporter

WASHINGTON.—The FTC has proved once again that you can't necessarily make people do what you want them to. In this case, it is comply with the commission's rule regarding credit advertising in newspapers, and the people involved are automobile dealers.

In a report issued last week, the FTC said that it had convinced 92 percent of 929 dealers and dealer ad agencies previously not in compliance with its credit advertising guidelines to adhere to them.

At the same time, however, FTC reported that overall compliance with its advertising requirements was 86 percent and that dealers in some areas of the country were not as ready to step to the line as others. Nonetheless, it labeled the voluntary program a success.

"We are gratified by the way in which auto dealers have responded to our educational program, and we will continue to work with the industry to achieve maximum voluntary compliance," said Anne Price Fortney, FTC associate director for credit practices.

The FTC undertook the program in 1983 after it received numerous complaints about deceptive newspaper advertising of auto credit terms. It conducted a survey of dealers' newspaper advertising and found only a 70 percent compliance rate with its Regulation Z requirements.

Regulation Z is the implementing guideline for the Truth in Lending Act which requires credit advertisers to give consumers information that will enable them to compare credit terms.

Under the law, advertisers who state an interest rate must also provide the annual percentage rate (the total cost of credit). In addition, the use of certain terms in ads "triggers" the requirement to state other major loan terms. For example, some auto dealers were found to be advertising only the amount of the downpayment without stating the annual percentage rate or the repayment terms.

Under the voluntary compliance

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GM's proposed van to have plastic body

By Dan McCosh
Detroit Reporter

General Motors' proposed front-drive minivan, slated for the 1989-1990 time frame, has emerged as yet another plastic-skinned program at General Motors. It brings to five the number of GM car programs involving plastic bodies being contemplated before 1990.

The rapid acceptance of plastic exteriors by GM could bring production of such cars—heretofore limited to specialty sports models—close to one million for GM by 1990, according to some sources close to the programs.

The front-drive minivan still does not have corporate approval, although the main consideration at this point seems to be which division gets it, rather than whether to produce it. Pontiac seems to be in the lead. Metalworking News reported recently that GM's Framingham (Mass.) assembly plant would be converted to produce the vehicle.

GM currently produces the Corvette and Fiero with plastic bodies, the latter with a unique "space frame." Chevrolet is also rumored to be quietly working on a sedan, while the GM80, the 1989-model replacements for the Chevrolet Camaro and Pontiac Firebird, likewise are expected to have plastic bodies. All are expected to feature a metal subframe, either in steel or aluminum.

Farther out, but rapidly moving out of the research stage, is a fully molded car, with metal used only in the high stress areas. GM's recently unveiled Wildcat show car (see Page 2) is built with that concept.

Other domestic auto makers, late in adopting the composite body, have recently been increasing development work.

At this time, Ford Motor Co. is not ruling out a composite body for its Alpha project (although GM's Saturn is still planned as a steel car). Chrysler Corp. is working on a plastic body for its new Z-van, due in 1988, and has a longer-range program studying full structural plastics for the mid-1990s.

Downey Toyota helps Mexican relief fund

DOWNEY, Calif.—Downey Toyota contributed $50 to the Mexican earthquake relief fund for every new and used car purchased over one weekend.

A total of $2,200 was donated to the cause.

Tax bounty poses problem for Spring Hill

SPRING HILL, Tenn.—City officials have postponed until Nov. 7 a decision on annexing land owned by General Motors for its Saturn plant.

The city has proposed that the Saturn site, now under the jurisdiction of Maury County, be annexed so that the city can share in the property taxes GM will pay. The city now is negotiating with the county for a share of the property taxes.

The Board of Aldermen earlier had voted 8-0 to approve the annexation upon a second reading. The final vote on the proposal was to have taken place last Tuesday (Oct. 22) but was postponed until November.

GM reportedly has threatened to withdraw the $3.5-billion project if the land is annexed.

Rover bares some details of XX model

By Richard Feast
European Editor

COVENTRY, England.—The decision by Honda to preview its luxury HX model in advance of this week's Tokyo Motor Show (Oct. 28-Nov. 11) prompted its Austin Rover Group (ARG) partners to reveal some of the details of the XX model which is to be made in England.

ARG's concern is that its version—scheduled for U.K. launch around next June—will be regarded merely as a spinoff from an existing Honda design, like the Rover 200 and Triumph Acclaim.

Harold J. Musgrove, ARG chairman and chief executive, insists that the new vehicle is an equal 50-50 engineering exercise.

The reasons for Honda's timing advantage of nearly nine months over ARG center on different methods of launching products in Japan and Europe, ARG's more extensive model range and Honda's ability to work more quickly with suppliers.

"We've learned from that," Musgrove admitted. He also acknowledged that a late redesign—"nothing unusual in that"—was another factor at ARG.

The ARG plan calls for a U.K. launch early next summer with a full model range and large stocks. The European launch will take place in the fall, and the North American introduction is slated for the beginning of 1987.

No U.S. marketing name has yet been decided, Musgrove said. Indications are that in Europe, the model will be known as the Rover 600.

The only version that will be

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60th year—No. 5098

AUTOMOTIVE NEWS (ISSN 0005-1551) is published weekly except semiweekly the fourth week in April at 1400 Woodbridge, Detroit, MI 48207. Second-class postage is paid at Detroit, MI and at additional mailing offices. Postmaster: Send address changes to AUTOMOTIVE NEWS, Circulation Department, 740 Rush Street, Chicago, IL 60611.

Agnelli says Fiat is eying export of Lancia to U.S.

By Michelle Krebs
Financial Editor

Fiat SpA is considering exporting to the U.S. one or more of its Lancia models, Fiat Chairman Giovanni Agnelli confirmed during a visit to Detroit.

Though Agnelli didn't specify which model or models would be exported, it has been speculated that the first model to hit U.S. shores will be a fast, more luxurious version of Lancia's current Thema model. The Thema, which originally was a Lancia-Saab joint venture, was introduced in Europe earlier this year.

However, the model likely to come to the U.S. will be a Thema with a Ferrari V-8 engine, which Fiat will introduce sometime in the first half of 1986. A four-wheel drive model will be introduced later.

Speaking to the Economic Club of Detroit, Agnelli said that aside from the Lancia, Fiat plans no major initiative in the U.S. market.

"We've been in and out of the U.S. market two or three times since the war," he said. "If you are European and you export luxury cars, you can make huge profits in the U.S. But if you are a European producer of popular cars with large numbers, you will be going head-to-head in the U.S. with the Japanese. It's easy to break your neck, and we're not willing to take the chance."

Fiat purchased Lancia in the mid 1960s. Agnelli said it has taken 15 years to integrate Lancia into the Fiat family. "It has taken some years of loss and many years of pain and trouble," he said.

The Lancia Division was at the break-even point last year, and this year, with its newer model range, is expected to increase its market appeal and improve its financial results.

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		Group 1 6,000 lbs. and less	Group 2 6,001-10,000	Group 3 10,001-14,000	Group 4 14,001-16,000	Group 5 16,001-19,500	Group 6 19,501-26,000	Group 7 26,001-33,000	Group 8 33,001 and over	Make Totals
AUTOCAR	Aug. '85	.....	.....	.....	.....	.....	.....	.....	193	193
	Aug. '84	.....	.....	.....	.....	.....	.....	.....	113	113
	Year to Date '85	.....	.....	.....	.....	.....	.....	.....	1,193	1,193
	Year to Date '84	.....	.....	.....	.....	.....	.....	.....	813	813
CHEVROLET	Aug. '85	60,326	50,205	2,889	.....	21	917	997	105	115,460
	Aug. '84	46,111	36,822	2,866	.....	26	892	932	88	87,737
	Year to Date '85	453,050	341,837	19,754	.....	167	3,965	6,820	417	826,010
	Year to Date '84	369,319	322,175	24,703	.....	155	4,029	5,725	403	726,509
(Memo Units)#	Aug. '85	41,274	18,314	.....	.....	.....	.....	.....	.....	59,588
	Aug. '84	32,019	15,791	.....	.....	.....	.....	.....	.....	47,810
	Year to Date '85	333,203	128,375	.....	.....	.....	.....	.....	.....	461,578
	Year to Date '84	253,583	132,813	.....	.....	.....	.....	.....	.....	386,396
DODGE	Aug. '85	26,383	12,989	.....	.....	.....	.....	.....	.....	39,372
	Aug. '84	20,981	10,723	.....	.....	.....	.....	.....	.....	31,704
	Year to Date '85	239,096	108,319	.....	.....	.....	.....	.....	.....	347,415
	Year to Date '84	181,503	91,533	.....	.....	.....	.....	.....	.....	273,036
(Memo Units)#	Aug. '85	18,296	7,221	.....	.....	.....	.....	.....	.....	25,517
	Aug. '84	15,321	6,834	.....	.....	.....	.....	.....	.....	22,155
	Year to Date '85	176,219	59,212	.....	.....	.....	.....	.....	.....	235,431
	Year to Date '84	130,747	57,699	.....	.....	.....	.....	.....	.....	188,446
FORD	Aug. '85	53,096	39,563	.....	.....	.....	1,250	2,121	1,196	97,226
	Aug. '84	27,850	59,718	.....	.....	.....	1,150	2,352	991	92,061
	Year to Date '85	462,252	326,523	.....	.....	.....	8,063	20,366	9,777	826,981
	Year to Date '84	214,068	514,041	.....	.....	.....	8,182	16,835	7,716	760,842
(Memo Units)#	Aug. '85	31,822	11,334	.....	.....	.....	.....	.....	.....	43,156
	Aug. '84	27 780	17,670	.....	.....	.....	.....	.....	.....	45,450
	Year to Date '85	300,691	105,178	.....	.....	.....	.....	.....	.....	405,869
	Year to Date '84	210,316	166,537	.....	.....	.....	.....	.....	.....	376,853
FREIGHTLINER	Aug. '85	.....	.....	.....	.....	.....	.....	.....	1,149	1,149
	Aug. '84	.....	.....	.....	.....	.....	.....	.....	1,284	1,284
	Year to Date '85	.....	.....	.....	.....	.....	.....	.....	11,942	11,942
	Year to Date '84	.....	.....	.....	.....	.....	.....	.....	9,769	9,769
GMC	Aug. '85	15,000	13,837	212	.....	553	738	1,169	613	32,122
	Aug. '84	11,390	11,348	240	.....	774	716	1,088	1,045	26,601
	Year to Date '85	107,231	92,482	3,073	.....	4,243	3,891	10,051	9,534	228,505
	Year to Date '84	86,878	89,644	979	.....	1,913	3,738	8,473	7,982	
										199,607
(Memo Units)#	Aug. '85	9,482	4,221	.....	.....	.....	.....	.....	.....	13,703
	Aug. '84	7,072	4,559	.....	.....	.....	.....	.....	.....	11,631
	Year to Date '85	74,505	31,109	.....	.....	.....	.....	.....	.....	105,614
	Year to Date '84	53,703	33,209	.....	.....	.....	.....	.....	.....	86,912
INTERNATIONAL	Aug. '85	.....	.....	.....	.....	.....	3,033	1,455	2,180	6,668
	Aug. '84	.....	.....	.....	.....	.....	3,270	1,507	2,459	7,236
	Year to Date '85	.....	.....	.....	.....	.....	16,543	10,906	19,682	47,131
	Year to Date '84	.....	.....	.....	.....	.....	12,834	9,660	18,409	40,903
JEEP	Aug. '85	10,815	1,570	.....	.....	.....	.....	.....	.....	12,385
	Aug. '84	9,212	1,448	.....	.....	.....	.....	.....	.....	10,660
	Year to Date '85	95,599	11,336	.....	.....	.....	.....	.....	.....	106,935
	Year to Date '84	77,680	13,401	.....	.....	.....	.....	.....	.....	91,081
(Memo Units)#	Aug. '85	10,815	1,463	.....	.....	.....	.....	.....	.....	12,278
	Aug. '84	9,212	1,244	.....	.....	.....	.....	.....	.....	10,456
	Year to Date '85	95,599	10,074	.....	.....	.....	.....	.....	.....	105,673
	Year to Date '84	77,680	11,126	.....	.....	.....	.....	.....	.....	88,806
KENWORTH	Aug. '85	.....	.....	.....	.....	.....	.....	.....	460	460
	Aug. '84	.....	.....	.....	.....	.....	.....	.....	1,048	1,048
	Year to Date '85	.....	.....	.....	.....	.....	.....	.....	6,874	6,874
	Year to Date '84	.....	.....	.....	.....	.....	.....	.....	8,616	8,616
MACK	Aug. '85	.....	.....	.....	.....	.....	294	87	1,719	2,100
	Aug. '84	.....	.....	.....	.....	.....	282	66	1,562	1,910
	Year to Date '85	.....	.....	.....	.....	.....	2,719	692	17,251	20,662
	Year to Date '84	.....	.....	.....	.....	.....	2,209	394	12,535	15,138
MERCEDES-BENZ	Aug. '85	.....	.....	.....	.....	.....	207	169	.....	376
	Aug. '84	.....	.....	.....	.....	.....	127	83	.....	210
	Year to Date '85	.....	.....	.....	.....	.....	1,697	1,252	.....	2,949
	Year to Date '84	.....	.....	.....	.....	.....	862	525	.....	1,387
PETERBILT	Aug. '85	.....	.....	.....	.....	.....	.....	.....	685	685
	Aug. '84	.....	.....	.....	.....	.....	.....	1,091	1,091	
	Year to Date '85	.....	.....	.....	.....	.....	.....	8,057	8,057	
	Year to Date '84	.....	.....	.....	.....	.....	.....	8,102	8,102	
PLYMOUTH	Aug. '85	7,628	.....	.....	.....	.....	.....	.....	.....	7,628
	Aug. '84	4,618	5	.....	.....	.....	.....	.....	.....	4,623
	Year to Date '85	72,361	.....	.....	.....	.....	.....	.....	.....	72,361
	Year to Date '84	51,213	106	.....	.....	.....	.....	.....	.....	51,319
VOLVO	Aug. '85	.....	.....	.....	.....	.....	.....	122	71	193
	Aug. '84	.....	.....	.....	.....	.....	.....	107	30	137
	Year to Date '85	.....	.....	.....	.....	.....	.....	973	566	1,539
	Year to Date '84	.....	.....	.....	.....	.....	.....	839	368	1,207
WESTERN STAR	Aug. '85	.....	.....	.....	.....	.....	.....	.....	98	98
	Aug. '84	.....	.....	.....	.....	.....	.....	.....	37	37
	Year to Date '85	.....	.....	.....	.....	.....	.....	.....	791	791
	Year to Date '84	.....	.....	.....	.....	.....	.....	.....	345	345
WHITE	Aug. '85	.....	.....	.....	.....	.....	.....	.....	513	513
	Aug. '84	.....	.....	.....	.....	.....	.....	.....	381	381
	Year to Date '85	.....	.....	.....	.....	.....	.....	.....	5,636	5,636
	Year to Date '84	.....	.....	.....	.....	.....	.....	.....	4,246	4,246
MISCELLANEOUS☆	Aug. '85	81,810	1,070	281	64	43	15	28	80	83,391
	June .84	62,102	723	41	51	.....	16	32	117	63,082
	Year to Date '85	567,159	7,198	2,152	607	230	94	246	1,312	578,998
	Year to Date '84	437,956	5,129	160	455	.....	53	102	722	444,577
TOTALS	Aug. '85	255,058	119,234	3,382	64	617	6,454	6,148	9,062	400,019
	Aug. '84	182,264	120,787	3,147	51	800	6,453	6,167	10,246	329,915
	Year to Date '85	1,996,748	887,695	24,979	607	4,640	36,972	51,306	91,032	3,093,979
	Year to Date '84	1,418,617	1,036,029	25,842	455	2,068	31,907	42,553	80,026	2,637,497

+—Manufacturers' sales records used for compiling Oklahoma and New York in 1984.

#—Memo units are trucks which are part of the total listed above each entry. Memo units are Chevrolet Van, El Camino, Blazer and S-10; Dodge compact trucks; Ford Econoline and Bronco; GMC Vandura, Jimmy, Caballero and S-15. ☆—Miscellaneous includes imports, FWD, Hendrickson, Oshkosh, etc. —Compiled from R. L. Polk & Co. data

In address to auto-district congressmen

Smith backs Reagan's policies

By Geoff Sundstrom
Washington Reporter

WASHINGTON.—President Reagan has a friend in Roger B. Smith, chairman of General Motors.

Addressing a group of congressmen from auto-producing districts, Smith echoed the President's policies on issues ranging from taxes to South Africa's apartheid system.

He even borrowed a line or two from the President's speechwriters, saying on the issue of world competition, "We're going to have to fight it out sooner or later, and if not now . . . then when?"

Referring to a Democratic trade bill that would impose a 25-percent tariff on imports from nations with high trade surpluses, Smith said he has a "hard time explaining to our shareholders why a tax on Japanese imports would be bad for General Motors."

He said the measure would lead to retaliation against U.S. exports and asked, "What do we tell our farmers who can't sell their corn and chickens in Japan?"

Smith touched on recent GM projects and acquisitions, mentioning Saturn, the purchase of EDS, the purchase of Hughes Aircraft and GM purchases and joint ventures in the robotics field.

Blunting criticism that the U.S. auto industry has tried to meet its competition by automating plants rather than improving worker attitudes, Smith lauded GM's labor contract with the UAW.

He said, "We guaranteed that if an employe is laid off because of the introduction of new technology, outsourcing, or negotiated productivity improvements, he won't be out on the street."

Smith said GM uses an average percentage of U.S.-made parts in the "high nineties."

He said, "People and high technology—that's the general strategy which is going to help us move aggressively into the future to protect our position as the world leader of car and truck manufacturing."

Although GM was unable to meet government-mandated CAFE standards and petitioned successfully for a rollback, Smith defended GM's fuel-economy record.

"GM cars are 22 percent lighter than they were in 1974, an average weight reduction of some 1,100 pounds," he said, "and we doubled the fuel economy of the cars we produce."

He said, however, "The fuel-economy standard was relaxed for 1986, which was greatly appreciated, but did not adequately address the problem. A similar adjustment for future model years is equally as important in order to avoid the potential of curtailing production of some car lines and throwing thousands of employes out of work."

Smith pointed to progress on the safety front, referring to Highway Loss Data Institute reports that show "year after year that overall injury claims of GM car owners are among the lowest in the industry." Many of those vehicles are the same large, V-8s that lead to GM's CAFE troubles.

He also told lawmakers they should "first and foremost" reduce the federal deficit and that "tax reform should be a top national priority." He said the key in both areas is "shared sacrifice" and "fairness."

On South Africa, Smith said that "a number of U.S. companies with facilities in that country have formed the U.S. Corporate Council on South Africa."

He said, "We have a history of being very clear about our strong opposition to apartheid and have made this opposition known to the South African Government.

"By being in South Africa, we think we may make a difference in moving more rapidly toward these goals, helping to bring an end to the tragic loss of life in that country while accomplishing peaceful but meaningful change."

8 technicians hit the heights in Chevy tests

Continued from Page 16

area of specialization in which they will compete during the entire year of the Performance Challenge. The eight areas are:

Brakes, suspensions and steering; gasoline and diesel engine overhaul; engine performance; automatic/manual transmissions, transaxles and rear axles; electrical, heating and air cooling; medium-duty truck; body metal, and body paint.

Level 1 of the Performance Challenge requires each technician to take a written test, competing against technicians in the same specialty in his Chevrolet geographical area. Winners in each specialization in each of the 320 areas receive a gift and proceed to the Level 2 exam.

Winners of the second exam are the highest scorers in each of the eight exam categories in each of Chevrolet's 39 zones and receive a $100 award. Level 3 testing reduces the competitors to the top technician in each of the eight specializations for each of Chevrolet's six regions. Each winner receives a $250 award.

The remaining 48 technicians—eight from each region—then take part in the Level 4 competition at Chevrolet headquarters here. The eight winners in the final test and their spouses are honored at a special dinner, and the remaining 40 technicians each receive a $500 award from Chevrolet.

U.S. HEAVY-DUTY REGISTRATIONS

EIGHT MONTHS, 1985 VS. 1984★

Make	8 mos., 1985	Percent Share of '85 market	8 mos., 1984	Percent Share of '84 market	Pct. pt. Change, '85-'84
International	30,588	21.49	28,069	22.90	−1.41
Ford	30,143	21.18	24,551	20.03	+1.15
Mack	17,943	12.61	12,929	10.55	+2.06
GMC	17,585	12.35	16,455	13.42	−1.07
Freightliner	11,942	8.39	9,769	7.97	+0.42
Peterbilt	8,057	5.66	8,102	6.61	−0.95
Kenworth	6,874	4.83	8,616	7.03	−2.20
Chevrolet	7,237	5.08	6,128	5.00	+0.08
White	5,636	3.96	4,246	3.46	+0.50
Volvo	1,539	1.08	1,207	0.99	+0.09
Mercedes-Benz	1,252	0.88	525	0.43	+0.45
Autocar	1,193	0.84	813	0.66	+0.18
Western Star	791	0.56	345	0.28	+0.28
Miscellaneous	1,558	1.09	824	0.67	+0.42
TOTALS	142,338	100.00	122,579	100.00	——

★—Group 7 and 8 trucks only.

U.S. TRUCK REGISTRATIONS

EIGHT MONTHS, 1985 VS. 1984★

Make	8 mos., 1985	Percent Share of '85 market	8 mos., 1984	Percent Share of '84 market	Pct. pt. Change, '85-'84
Ford	826,981	26.73	760,842	28.85	−2.12
Chevrolet	826,010	26.70	726,509	27.55	−0.85
Dodge	347,415	11.23	273,036	10.35	+0.88
GMC	228,505	7.38	199,607	7.57	−0.19
Jeep	106,935	3.46	91,081	3.45	+0.01
Plymouth	72,361	2.34	51,319	1.95	+0.39
International	47,131	1.52	40,903	1.55	−0.03
Mack	20,662	0.67	15,138	0.57	+0.10
Freightliner	11,942	0.39	9,769	0.37	+0.02
Peterbilt	8,057	0.26	8,102	0.31	−0.05
Kenworth	6,874	0.22	8,616	0.33	−0.11
White	5,636	0.18	4,246	0.16	+0.02
Mercedes	2,949	0.09	1,387	0.05	+0.04
Volvo	1,539	0.05	1,207	0.04	+0.01
Autocar	1,193	0.04	813	0.03	+0.01
Western Star	791	0.03	345	0.01	+0.02
Miscellaneous☆	578,998	18.71	444,577	16.86	+1.85
TOTALS	3,093,979	100.00	2,637,497	100.00	——

★—All truck registrations in Oklahoma, and in 1984, New York, compiled from manufacturers' sales records.
☆—Miscellaneous includes imports, Crane Carrier, Oshkosh, FWD, Hendrickson, etc.

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EPA Mileage Ratings for '86 models

TWO SEATERS

Model	Est. MPG City	Est. MPG Hwy.	Engine CID	†Trans.
Alfa Romeo Spider	21	28	120	M5
Bertone X 1/9	23	28	91	M5
Chevrolet Corvette	17	24	350	L4
Chevrolet Corvette	17	24	350	M4
Chevrolet Corvette Conv.	17	24	350	L4
Chevrolet Corvette Conv.	17	24	350	M4
Ford EXP	25	30	113	A3
Ford EXP	27	34	113	M5
Ford EXP	22	28	113	A3
Ford EXP	24	33	113	M5
Honda Civic Coupe	28	35	91	L4
Honda Civic Coupe	31	37	91	M5
Honda Civic Coupe FI	30	33	91	M5
Honda Civic Coupe HF	45	50	91	M5
Honda Civic Coupe HF	52	57	91	M5
Mercedes-Benz 560-SL	14	17	338	A4
Nissan 300-ZX	18	25	181	L4
Nissan 300-ZX	18	25	181	M5
Pontiac Fiero	25	32	151	L3
Pontiac Fiero	24	35	151	M5
Pontiac Fiero	18	25	173	L3
Pontiac Fiero	19	27	173	M4
Subaru XT-DL	25	32	109	M5
Toyota MR2	25	31	97	L4
Toyota MR2	26	31	97	M5

MINICOMPACTS

Model	City	Hwy.	Engine CID	†Trans.
Alfa Romeo GTV	19	26	152	M5
Chevrolet Sprint	40	42	61	A3
Chevrolet Sprint	44	50	61	M5
Chevrolet Sprint ER	55	60	61	M5
Mazda RX-7	17	24	80	L4
Mazda RX-7	17	24	80	M5
*Pontiac Firefly FE	40	42	61	A3
*Pontiac Firefly FE	44	50	61	M5
Porsche 911 Turbo	16	22	201	M4
Suzuki Forsa	40	42	61	A3
Suzuki Forsa	44	50	61	M5
Volkswagen Cabriolet	23	25	109	A3
Volkswagen Cabriolet	24	29	109	M5

SUBCOMPACTS

Model	City	Hwy.	Engine CID	†Trans.
Audi Coupe GT	18	23	136	A3
Audi Coupe GT	19	25	136	M5
Audi 4000-CS Quattro	18	22	136	M5
Audi 4000-S	23	27	109	A3
Audi 4000-S	25	30	109	M5
Chevrolet Camaro	23	32	151	M5
Chevrolet Camaro	19	27	173	L4
Chevrolet Camaro	17	26	173	M5
Chevrolet Camaro	17	25	305	L4
Chevrolet Camaro	16	26	305	M5
Chevrolet Camaro	17	25	305	L4
Chevrolet Cavalier Conv.	22	28	121	L3
Chevrolet Cavalier Conv.	25	32	121	M4
Chevrolet Cavalier Conv.	24	32	121	M5
Chevrolet Cavalier Conv.	18	25	173	L3
Chevrolet Cavalier Conv.	18	24	173	M4
Chevrolet Chevette	25	30	98	L3
Chevrolet Chevette	28	34	98	M4
Chevrolet Chevette	27	35	98	M5
Chevrolet Chevette Diesel	40	46	111	M5
Chevrolet Spectrum	31	34	90	A3
Chevrolet Spectrum	38	42	90	M5
Chevrolet Sprint Plus	41	43	61	A3
Chevrolet Sprint Plus	44	50	61	M5
Chrysler Laser	24	27	135	A3
Chrysler Laser Turbo	20	24	135	A3
Chrysler Laser Turbo	19	28	135	M5
Chrysler Laser	25	35	135	M5
Chrysler Laser	23	25	152	A3
Chrysler Laser	23	32	152	M5
Chrysler LeBaron Conv.	24	27	135	A3
Chrysler LeBaron Turbo Conv.	20	24	135	A3
Chrysler LeBaron Conv.	23	25	152	A3
Dodge Charger	28	33	97	M4
Dodge Charger	31	39	97	M4
Dodge Charger	24	30	135	A3
Dodge Charger	22	30	135	M5
Dodge Charger	26	36	135	M5
Dodge Charger Turbo	20	27	135	M5
Dodge Colt	29	32	90	L3
Dodge Colt	36	41	90	M4
Dodge Colt	33	39	90	M5
Dodge Colt Turbo	24	26	98	L3
Dodge Colt Turbo	24	31	98	M5
Dodge Conquest Turbo	19	24	156	L4
Dodge Conquest Turbo	19	24	156	M5
Dodge Daytona	24	27	135	A3
Dodge Daytona Turbo	23	24	135	A3
Dodge Daytona Turbo	19	28	135	M5
Dodge Daytona	25	35	135	M5
Dodge Daytona	23	25	152	A3
Dodge Daytona	23	32	152	M5
Dodge 600 Conv.	24	27	135	A3
Dodge 600 Conv. Turbo	20	24	135	A3
Dodge 600 Conv.	23	25	152	A3
*Ford Laser	25	30	98	A3
*Ford Laser	26	30	98	M4
Ford Mustang	21	25	140	A3
Ford Mustang	23	28	140	M4
Ford Mustang Turbo	20	26	140	M5
Ford Mustang	18	23	231	L3
Ford Mustang	17	25	302	M5
Honda Accord	24	30	119	L4
Honda Accord	27	33	119	M5
Honda Accord FI	23	29	119	L4
Honda Accord FI	25	30	119	M5
Honda Civic	37	43	82	M4
Honda Civic	28	32	91	L4
Honda Civic	30	35	91	M5
Honda Civic FI	30	33	91	M5
Honda Prelude	23	30	112	L4
Honda Prelude	24	32	112	M5
Honda Prelude FI	23	29	119	L4
Honda Prelude FI	25	30	119	M5
Isuzu I-Mark	31	34	90	A3
Isuzu I-Mark	34	40	90	M5
Isuzu I-Mark	38	42	90	M5
Isuzu Impulse	22	25	119	A4
Isuzu Impulse	22	28	119	M5
Isuzu Impulse Turbo	20	25	121	L4
Isuzu Impulse Turbo	20	25	121	M5
Jaguar XJ-S	13	17	326	A3
Jaguar XJ-6	15	19	258	A3
Mercury Capri	21	25	140	A3
Mercury Capri	23	28	140	M4
Mercury Capri	19	23	231	L3
Mercury Capri	17	25	302	M5
Mercedes-Benz 190	20	23	140	A4
Mercedes-Benz 190	21	24	140	A4
Mercedes-Benz 190	18	26	140	M5
Mercedes-Benz 190	19	27	140	M5
Mercedes-Benz 190	30	34	152	A4
Mercedes-Benz 190	29	37	152	M5
Mitsubishi Cordia	22	28	110	M5
Mitsubishi Cordia	24	26	122	L3
Mitsubishi Cordia	25	32	122	M5
Mitsubishi Mirage	29	32	90	L3
Mitsubishi Mirage	38	41	90	M4
Mitsubishi Mirage	33	39	90	M5
Mitsubishi Mirage Turbo	24	26	98	L3
Mitsubishi Mirage Turbo	24	31	98	M5
Mitsubishi Starion Turbo	19	24	156	L4
Mitsubishi Starion Turbo	19	24	156	M5
Mitsubishi Tredia Turbo	22	28	110	M5
Mitsubishi Tredia	24	26	122	L3
Mitsubishi Tredia	24	31	122	M5
Nissan Pulsar NX	27	30	98	L3
Nissan Pulsar NX	31	38	98	M5
Nissan Sentra	27	30	98	L3
Nissan Sentra	31	38	98	M5
Nissan Sentra Diesel	45	50	103	M4
Nissan 200-SX Turbo	22	27	110	M5
Nissan 200-SX	22	28	120	L4
Nissan 200-SX	22	27	120	M5
Nissan 300-ZX 2+2	17	25	181	L4
Nissan 300-ZX 2+2	18	26	181	M5
Plymouth Colt	29	32	90	L3
Plymouth Colt	36	41	90	M4
Plymouth Colt	33	39	90	M5
Plymouth Colt Turbo	24	26	98	L3
Plymouth Colt Turbo	24	31	98	M5
Plymouth Conquest Turbo	19	24	156	L4
Plymouth Conquest Turbo	19	24	156	M5
Plymouth Turismo	28	33	97	M4
Plymouth Turismo	31	39	97	M4
Plymouth Turismo	24	30	135	A3
Plymouth Turismo	22	30	135	M5
Plymouth Turismo	26	35	135	M5
Pontiac Firebird FI	23	32	151	M5
Pontiac Firebird FI	19	27	173	L4
Pontiac Firebird FI	17	26	173	M5
Pontiac Firebird	17	25	305	L4
Pontiac Firebird	16	26	305	M5
Pontiac Firebird	17	25	305	L4
*Pontiac Firefly	41	43	61	A3
*Pontiac Firefly	44	50	61	M5
Pontiac Sunbird Conv. Turbo	20	27	110	L3
Pontiac Sunbird Conv.	24	30	110	L3
Pontiac Sunbird Conv. Turbo	21	28	110	M4
Pontiac Sunbird Conv.	26	35	110	M5
Pontiac 1000	25	30	98	L3
Pontiac 1000	28	34	98	M4
Pontiac 1000	27	34	98	M5
Renault Alliance Conv.	21	23	105	A3
Renault Alliance Conv.	27	32	105	M5
Renault Fuego	20	24	132	A3
Renault Fuego	23	31	132	M5
Rolls-Royce Corniche II/ Continental	8	11	412	A3
Subaru Hatchback	31	36	97	M4
Subaru Hatchback	28	32	97	M5
Subaru Hatchback	23	25	109	L3
Subaru Hatchback	26	31	109	M5
Subaru XT	24	27	109	L3
Subaru XT Turbo	23	25	109	L3
Subaru XT	25	32	109	M5
Subaru XT Turbo	25	30	109	M5
Suzuki Forsa V	41	43	61	A3
Suzuki Forsa V	44	50	61	M5
Toyota Celica	23	29	122	L4
Toyota Celica	25	30	122	L4
Toyota Celica	25	31	122	M5
Toyota Celica	23	29	122	M5
Toyota Celica Supra	19	24	168	L4
Toyota Celica Supra	18	22	168	M5
Toyota Corolla Sport	27	33	97	L4
Toyota Corolla Sport	28	33	97	M5
Toyota Corolla Sport FI	26	31	97	M5
Toyota Tercel	30	32	89	A3
Toyota Tercel	35	39	89	M4
Toyota Tercel	31	38	89	M5
Volkswagen Scirocco	23	25	109	A3
Volkswagen Scirocco	24	29	109	M5

COMPACTS

Model	City	Hwy.	Engine CID	†Trans.
BMW 5-Series	23	29	149	L4
BMW 5-Series	18	24	164	L4
BMW 5-Series	20	24	164	M5
Buick Skyhawk	24	31	110	L3
Buick Skyhawk Turbo	20	27	110	L3
Buick Skyhawk Turbo	21	28	110	M4
Buick Skyhawk	27	37	110	M5
Buick Skyhawk	23	29	121	L3
Buick Skyhawk	25	32	121	M4
Buick Somerset/Skylark	23	32	151	L3
Buick Somerset/Skylark	23	34	151	M5
Buick Somerset/Skylark	19	27	181	L3
Cadillac Cimarron	22	27	121	L3
Cadillac Cimarron	24	32	121	M5
Cadillac Cimarron	18	25	173	L3
Cadillac Cimarron	17	22	173	M4
Chevrolet Cavalier	23	29	121	L3
Chevrolet Cavalier	26	33	121	M4
Chevrolet Cavalier	24	32	121	M5
Chevrolet Cavalier	19	24	173	L3
Chevrolet Cavalier	19	26	173	M4
Chevrolet Nova	28	32	97	L3
Chevrolet Nova	30	37	97	M5
Dodge Omni	28	33	97	M4
Dodge Omni	31	39	97	M4
Dodge Omni	24	29	135	A3
Dodge Omni	22	30	135	M5
Dodge Omni	26	35	135	M5
Dodge Omni Turbo	20	27	135	M5
Ford Escort	25	30	113	A3
Ford Escort	32	41	113	M4
Ford Escort	27	34	113	M5
Ford Escort FI	22	28	113	A3
Ford Escort FI	24	33	113	M5
Ford Escort Diesel	36	43	122	M5
Ford Escort FS Diesel	41	49	122	M5
Ford Tempo Diesel	36	44	122	M5
Ford Thunderbird Turbo	18	22	140	A3
Ford Thunderbird Turbo	20	26	140	M5
Ford Thunderbird	19	26	231	A4
Ford Thunderbird	19	23	231	L3
Mercury Cougar Turbo	18	22	140	A3
Mercury Cougar Turbo	20	26	140	M5
Mercury Cougar	19	26	231	A4
Mercury Cougar	19	23	231	L3
Mercury Lynx	25	30	113	A3
Mercury Lynx	32	41	113	M4
Mercury Lynx	27	34	113	M5
Mercury Lynx FI	22	28	113	A3
Mercury Lynx FI	24	32	113	M5
Mercury Lynx FI	36	43	122	M5
Mercury Topaz Diesel	36	44	122	M5
Mazda 323	25	30	98	A3
Mazda 323	26	30	98	M4
Mazda 323	28	34	98	M5
Mazda 626	24	28	122	A3
Mazda 626 Turbo	22	28	122	M5
Mazda 626	26	32	122	M5
Mercedes-Benz 300-E	18	22	181	A4
Mercedes-Benz 300-E	18	25	181	M5
Mercedes-Benz 560-SEC	14	16	338	A4
Merkur XR4Ti Turbo	18	22	140	A3
Merkur XR4Ti Turbo	19	24	140	M5
Mitsubishi Galant	21	26	143	L4
Nissan Maxima	18	24	181	L4
Nissan Maxima	19	26	181	M5
Nissan Stanza	23	26	120	L3
Nissan Stanza	26	33	120	M5
Oldsmobile Calais	23	32	151	L3
Oldsmobile Calais	23	34	151	M5
Oldsmobile Calais	19	27	181	L3
Oldsmobile Firenza Turbo	20	27	110	L3
Oldsmobile Firenza	24	31	110	L3
Oldsmobile Firenza Turbo	21	28	110	M4
Oldsmobile Firenza	27	37	110	M5
Oldsmobile Firenza	23	29	121	L3
Oldsmobile Firenza	25	32	121	M4
Oldsmobile Firenza	19	24	173	L3
Oldsmobile Firenza	19	26	173	M4
Peugeot 505 Sedan	20	23	120	L4
Peugeot 505 Sedan	20	24	120	M5
Peugeot 505 Sedan	19	22	131	L4
Peugeot 505 Sedan	19	24	131	M5
Plymouth Horizon	28	33	97	M4
Plymouth Horizon	31	39	97	M4
Plymouth Horizon	24	29	135	A3
Plymouth Horizon	26	35	135	M5
Pontiac Grand Am	23	32	151	L3
Pontiac Grand Am	23	34	151	M5
Pontiac Grand Am	19	27	181	L3
Pontiac Sunbird	24	31	110	L3
Pontiac Sunbird Turbo	20	27	110	L3
Pontiac Sunbird Turbo	21	28	110	M4
Pontiac Sunbird	27	37	110	M5
Renault Alliance/Encore	26	30	85	A3
Renault Alliance/Encore	32	38	85	M4
Renault Alliance/Encore	35	41	85	M4
Renault Alliance/Encore	33	39	95	M5
Renault Alliance/Encore	24	28	105	A3
Renault Alliance/Encore	30	37	105	M5
Rolls-Royce Camargue	8	11	412	A3
Saab 900	19	23	121	A3
Saab 900 Turbo	18	22	121	A3
Saab 900	21	28	121	M5
Saab 900 Turbo	20	26	121	M5
Saab 900	20	24	121	M5
Subaru Sedan/3-Door	26	31	109	M5
Subaru Sedan/3-Door Turbo	23	25	109	L3
Subaru Sedan/3-Door	25	27	109	L3
Subaru Sedan/3-Door Turbo	25	30	109	M5
Subaru 3-Door 4WD Turbo	24	29	109	M5
Toyota Camry Turbo	30	36	120	L4
Toyota Camry	26	32	122	L4
Toyota Camry	28	34	122	M5
Toyota Corolla	26	33	97	L3
Toyota Corolla	28	35	97	L4
Toyota Corolla	31	37	97	M5
Toyota Cressida	19	23	168	L4
Toyota Cressida	19	24	168	M5
Volkswagen Golf Diesel	37	44	97	M5
Volkswagen Golf	23	27	109	A3
Volkswagen Golf	27	34	109	M5
Volkswagen GTI	26	31	109	M5
Volkswagen Jetta Diesel	37	44	97	M5
Volkswagen Jetta Diesel	36	43	97	M5
Volkswagen Jetta	23	27	109	A3
Volkswagen Jetta	27	34	109	M5
Volkswagen Jetta GLI	23	27	109	A3
Volkswagen Jetta GLI	26	31	109	M5
Volkswagen Quantum	18	22	136	A3
Volkswagen Quantum	19	24	136	M5
Volvo 240DL/240GL	21	24	141	A4
Volvo 240DL/240GL	23	28	141	M4

MID-SIZE CARS

Model	City	Hwy.	Engine CID	†Trans.
Audi 5000-CS Quattro Turbo	17	25	136	M5
Audi 5000-S	18	22	136	A3
Audi 5000-S	19	26	136	M5
Buick Century	22	32	151	L3
Buick Century	19	26	173	L3
Buick Century	20	28	173	L4
Buick Century	19	29	231	L4
Buick Regal	18	24	231	L3
Buick Regal Turbo	17	24	231	L4
Buick Regal	17	23	307	L3
Buick Regal	18	25	307	L4
Buick Riviera	19	30	231	L4
Cadillac Eldorado	17	26	249	L4
Cadillac Seville	17	26	249	L4
Chevrolet Celebrity FI	22	32	151	L3
Chevrolet Celebrity FI	23	31	151	M4
Chevrolet Celebrity	19	26	173	L3
Chevrolet Celebrity	20	28	173	L4
Chevrolet Celebrity FI	18	25	173	L3
Chevrolet Celebrity FI	19	28	173	L4
Chevrolet Monte Carlo FI	18	23	262	L3
Chevrolet Monte Carlo FI	18	27	262	L4
Chevrolet Monte Carlo	17	25	305	L4
Chrysler LeBaron	20	24	135	A3
Chrysler LeBaron	24	27	135	A3
Chrysler LeBaron	23	25	152	A3
Chrysler LeBaron GTS Turbo	20	24	135	A3
Chrysler LeBaron GTS	24	27	135	A3
Chrysler LeBaron GTS Turbo	19	28	135	M5
Chrysler LeBaron GTS	25	35	135	M5
Chrysler LeBaron GTS	23	25	152	A3
Chrysler LeBaron GTS	23	32	152	M5
Chrysler Limousine Turbo	19	23	135	A3
Chrysler New Yorker Turbo	20	24	135	A3
Chrysler New Yorker	23	25	152	A3
Chrysler Newport/ Fifth Avenue	16	21	318	L3
Dodge Aries	24	28	135	A3
Dodge Aries	25	35	135	M5
Dodge Aries	23	26	152	A3
Dodge Diplomat	16	21	318	L3
Dodge Lancer	24	27	135	A3
Dodge Lancer Turbo	20	24	135	A3
Dodge Lancer Turbo	19	28	135	M5
Dodge Lancer	25	35	135	M5
Dodge Lancer	23	25	152	A3
Dodge Lancer	23	32	152	M5
Dodge 600 Turbo	20	24	135	A3
Dodge 600	24	27	135	A3
Dodge 600	23	25	152	A3
Ford LTD	21	25	140	A3
Ford LTD	19	23	231	L3
Lincoln Continental	18	26	302	L4
Lincoln Mark VII	18	26	302	L4
Mercury Marquis	21	25	140	A3
Mercury Marquis FI	19	23	231	L3
Mercedes-Benz 420-SEL	15	18	256	A4
Mercedes-Benz 560-SEL	14	16	338	A4
Oldsmobile Cutlass Ciera FI	22	32	151	L3
Oldsmobile Cutlass Ciera	19	26	173	L3
Oldsmobile Cutlass Ciera	20	28	173	L4
Oldsmobile Cutlass Ciera FI	18	25	173	L3
Oldsmobile Cutlass Ciera FI	19	28	173	L4
Oldsmobile Cutlass Ciera FI	19	30	231	L4
Oldsmobile Cutlass Supreme	18	24	231	L3
Oldsmobile Cutlass Supreme	17	23	307	L3
Oldsmobile Cutlass Supreme	18	25	307	L4
Oldsmobile Toronado	19	30	231	L4
Plymouth Caravelle	24	27	135	A3
Plymouth Caravelle Turbo	20	24	135	A3
Plymouth Caravelle	23	25	152	A3
Plymouth Grand Fury	16	21	318	L3
Plymouth Reliant	24	28	135	A3
Plymouth Reliant	25	35	135	M5
Plymouth Reliant	23	26	152	A3
Pontiac Bonneville	18	24	231	L3
Pontiac Bonneville FI	18	23	262	L3
Pontiac Bonneville FI	18	27	262	L4
Pontiac Bonneville	17	25	305	L4
Pontiac Grand Prix	18	24	231	L3
Pontiac Grand Prix FI	18	23	262	L3
Pontiac Grand Prix FI	18	27	262	L4
Pontiac Grand Prix	17	25	305	L4
Pontiac 6000 FI	22	32	151	L3
Pontiac 6000	19	26	173	L3
Pontiac 6000	20	28	173	L4
Pontiac 6000 FI	18	24	173	L3
Pontiac 6000 FI	18	26	173	L4
Rolls-Royce Silver Spirit/Spur/Mulsanne	9	10	412	A3
Volvo 740/760 Turbo	19	22	141	A4
Volvo 740/760	22	25	141	L4
Volvo 740/760 Turbo	20	25	141	M4
Volvo 740/760	23	28	141	M4
Volvo 740/760 Diesel	24	27	145	L4
Volvo 740/760	18	22	174	A4

STANDARDS

Model	City	Hwy.	Engine CID	†Trans.
Buick Electra	19	30	231	L4
Buick LeSabre	19	30	231	L4
Cadillac DeVille	17	26	249	L4
Cadillac Fleetwood Brougham	18	25	307	L4
Cadillac Limousine	17	24	249	L4
Chevrolet Caprice FI	18	23	262	L3
Chevrolet Caprice FI	18	25	262	L4
Chevrolet Caprice	17	25	305	L4
Chevrolet Caprice	18	25	307	L4
Ford LTD Crown Victoria	18	26	302	L4
Lincoln Town Car	18	26	302	L4
Mercury Grand Marquis	18	26	302	L4
Oldsmobile Delta 88 Royale	19	30	231	L4
Oldsmobile Ninety-Eight Regency	19	30	231	L4
Pontiac Parisienne FI	18	23	262	L3
Pontiac Parisienne FI	18	25	262	L4
Pontiac Parisienne	17	25	305	L4
Rolls-Royce Silver Spur Limousine	8	10	412	A3
Saab 9000	21	28	121	M5

SMALL STATION WAGONS

Model	City	Hwy.	Engine CID	†Trans.
Buick Skyhawk	24	31	110	L3
Buick Skyhawk	27	37	110	M5
Buick Skyhawk	23	29	121	L3
Buick Skyhawk	25	32	121	M4
Chevrolet Cavalier	23	29	121	L3
Chevrolet Cavalier	25	32	121	M4
Chevrolet Cavalier	24	32	121	M5
Chevrolet Cavalier	18	25	173	L3
Chevrolet Cavalier	19	26	173	M4
Dodge Colt Vista	23	24	122	L3
Dodge Colt Vista	24	29	122	M5
Ford Escort	25	30	113	A3
Ford Escort	32	41	113	M4
Ford Escort	27	34	113	M5
Ford Escort Diesel	36	43	122	M5
Honda Civic	28	32	91	L4
Honda Civic	30	35	91	M5
Mercury Lynx	25	30	113	A3
Mercury Lynx	32	41	113	M4
Mercury Lynx	27	34	113	M5
Mercury Lynx Diesel	36	43	122	M5
*Mazda GLC	22	23	91	A3
*Mazda GLC	25	29	91	M4
*Mazda GLC	25	30	91	M5
*Mitsubishi Space Wagon	23	24	122	L3
Nissan Maxima	18	24	181	L4
Nissan Sentra	27	30	98	L3
Nissan Sentra	31	38	98	M5
Oldsmobile Firenza	24	31	110	L3
Oldsmobile Firenza	27	37	110	M5
Oldsmobile Firenza	23	29	121	L3
Oldsmobile Firenza	25	32	121	M4
Oldsmobile Firenza	18	25	173	L3
Oldsmobile Firenza	19	25	173	M4
Plymouth Colt Vista	23	24	122	L3
Plymouth Colt Vista	24	29	122	M5
Pontiac Sunbird	24	31	110	L3
Pontiac Sunbird	27	37	110	M5
Renault 18i Sportwagon	20	24	132	A3
Renault 18i Sportwagon	23	31	132	M5
Subaru	26	31	109	M5
Subaru FI	25	26	109	L3
Subaru Turbo	23	25	109	L3
Subaru Turbo	25	30	109	M5
Toyota Tercel 2WD	28	31	89	A3
Toyota Tercel 2WD	31	37	89	M5
Toyota Tercel 4WD	24	25	89	A3
Toyota Tercel 4WD	27	32	89	M5
Volkswagen Quantum	22	25	109	A3
Volkswagen Quantum	25	31	109	M5

MID-SIZE STATION WAGONS

Model	City	Hwy.	Engine CID	†Trans.
Audi 5000-CS Quattro Turbo	17	25	136	M5
Audi 5000-S	17	22	136	A3
Audi 5000-S	19	25	136	M5
Buick Century FI	21	28	151	L3
Buick Century	19	25	173	L3
Buick Century	19	25	173	L4
Buick Century FI	19	30	231	L4
Chevrolet Celebrity FI	22	31	151	L3
Chevrolet Celebrity FI	23	31	151	M4
Chevrolet Celebrity	19	25	173	L3
Chevrolet Celebrity	19	25	173	L4
Chevrolet Celebrity FI	18	24	173	L3
Chevrolet Celebrity FI	18	26	173	L4
Chrysler Town & Country Wagon Turbo	20	24	135	A3
Chrysler Town & Country	23	25	152	A3
Dodge Aries	24	27	135	A3
Dodge Aries	25	35	135	M5
Dodge Aries	23	25	152	A3
Ford LTD	19	23	231	L3
Mercury Marquis	19	23	231	L3
Nissan Stanza 2WD	20	25	120	L4
Nissan Stanza 2WD	23	28	120	M5
Oldsmobile Cutlass Cruiser FI	21	28	151	L3
Oldsmobile Cutlass Cruiser	19	25	173	L3
Oldsmobile Cutlass Cruiser	19	25	173	L4
Oldsmobile Cutlass Cruiser FI	18	24	173	L3
Oldsmobile Cutlass Cruiser FI	18	26	173	L4
Peugeot 505	20	23	120	L4
Peugeot 505	20	24	120	M5
Peugeot 505	19	22	131	L4
Plymouth Reliant	24	27	135	A3
Plymouth Reliant	25	35	135	M5
Plymouth Reliant	23	25	152	A3
Pontiac 6000 FI	21	28	151	L3
Pontiac 6000	19	25	173	L3
Pontiac 6000	19	25	173	L4
Pontiac 6000 FI	18	24	173	L3
Pontiac 6000 FI	18	26	173	L4
Toyota Cressida	19	23	168	L4
Volvo 240DL/240GL	21	24	141	A4
Volvo 240DL/240GL	23	28	141	M4
Volvo 740/760 Turbo	19	22	141	A4
Volvo 740/760	22	26	141	L4
Volvo 740/760	23	28	141	M4
Volvo 740/760 Turbo	20	25	141	M4
Volvo 740/760 Turbo	24	27	145	L4

LARGE STATION WAGONS

Model	City	Hwy.	Engine CID	†Trans.
Buick LeSabre/Electra	16	24	307	L4
Chevrolet Caprice	15	22	305	L4
Chevrolet Caprice	16	24	307	L4
Ford LTD Crown Victoria	18	26	302	L4
Mercury Grand Marquis	18	26	302	L4
Oldsmobile Custom Cruiser	16	24	307	L4
Pontiac Parisienne	15	22	305	L4
Pontiac Parisienne	16	24	307	L4

SMALL PICKUPS/2WD

Model	City	Hwy.	Engine CID	†Trans.
Chevrolet S-10	21	28	151	L4
Chevrolet S-10	23	27	151	M4
Chevrolet S-10	24	30	151	M5
Dodge Ram 50 2WD	22	24	122	A3
Dodge Ram 50 2WD	23	27	122	M5
Dodge Ram 50 2WD	21	21	156	A3
Dodge Ram 50 2WD	20	25	156	M5
*Ford Courier	22	27	122	M5
Ford Ranger	23	27	122	M5
Ford Ranger FI	21	26	140	L4
Ford Ranger Diesel	29	32	140	M5
Ford Ranger FI	26	29	140	M5
Ford Ranger FI	18	24	179	L4
Ford Ranger FI	19	24	179	M5
GMC S-15 Pickup	21	28	151	L4
GMC S-15 Pickup	23	27	151	M4
GMC S-15 Pickup	24	30	151	M5
Isuzu Motors Limited P'Up 2WD	23	28	119	M4
Isuzu P'Up	25	31	119	M4
Isuzu P'Up Diesel	27	27	137	A3
Isuzu P'Up Diesel	35	38	137	M4
Isuzu P'Up Diesel	32	35	137	M5
Isuzu P'Up Diesel	31	33	137	M5
Isuzu P'Up	21	23	138	A3
Isuzu P'Up	21	23	138	A3
Isuzu P'Up	22	26	138	M5
Isuzu P'Up	22	26	138	M5
Mazda B-2000	21	26	122	M4
Mazda B-2000	22	27	122	M5
Mitsubishi 2WD	22	24	122	A3
Mitsubishi 2WD	23	26	122	M4
Mitsubishi 2WD	23	27	122	M5
Mitsubishi 2WD	20	25	156	M5
Nissan	26	31	119	M5
Nissan	20	22	146	L3
Nissan	22	26	146	M5
Nissan Diesel	30	33	152	M5
Toyota	22	24	144	A4
Toyota	22	23	144	A4
Toyota	27	31	144	M4
Toyota	25	29	144	M4
Toyota	21	26	144	M5
Toyota	22	27	144	M5
Toyota FI	23	25	144	A4
Toyota Turbo	21	23	144	L4
Toyota Turbo	21	24	144	M5
Toyota FI	23	28	144	M6

SMALL PICKUPS/4WD

Model	City	Hwy.	Engine CID	†Trans.
Dodge Power Ram 50	19	19	156	A3
Dodge Power Ram 50	19	23	156	M5
Ford Ranger Diesel	28	31	140	M5
Ford Ranger FI	25	27	140	M5
Ford Ranger FI	17	22	179	L4
Ford Ranger FI	18	22	179	M5
Isuzu P'Up Diesel	27	27	137	M5
Isuzu P'Up	19	23	138	M5
Isuzu P'Up	19	23	138	M5
Jeep Scrambler	16	18	258	A3
Jeep Scrambler	17	19	258	M4
Jeep Scrambler	17	21	258	M5
Mitsubishi	20	23	156	M5
Subaru Brat	24	29	109	M4
Subaru Brat	24	28	109	M4

STANDARD PICKUPS/2WD

Model	City	Hwy.	Engine CID	†Trans.
Chevrolet C-10	18	19	262	A3
Chevrolet C-10	16	19	262	L4
Chevrolet C-10	17	21	262	L4
Chevrolet C-10	16	19	262	M3
Chevrolet C-10	18	20	262	M4C
Chevrolet C-10	17	21	262	M4
Chevrolet C-10	16	20	262	M4
Chevrolet C-10	15	18	305	L3
Chevrolet C-10	15	20	305	L4
Chevrolet C-10	15	18	305	L4
Chevrolet C-10	14	18	305	M4C
Chevrolet C-10 Diesel	15	19	305	M4
Chevrolet C-10 Diesel	19	23	379	L4
Chevrolet C-10 Diesel	20	24	379	M4
Chevrolet C-10 Diesel	20	24	379	M4C
Chevrolet C-20	16	19	262	L4
Chevrolet C-20	15	18	262	M4C
Chevrolet C-20	15	18	305	L4
Chevrolet C-20	12	15	305	M4C
Chevrolet C-20	13	16	350	L4
Chevrolet C-20 Diesel	17	22	379	L4
Chevrolet C-20 Diesel	18	20	379	M4C
Chevrolet El Camino FI	17	21	262	L3
Chevrolet El Camino FI	17	24	262	L4
Chevrolet El Camino	16	19	305	L3
Chevrolet El Camino	17	23	305	L4
Dodge D-100/D-150	14	15	225	A3
Dodge D-100/D-150	15	17	225	L3
Dodge D-100/D-150	14	17	225	M4
Dodge D-100/D-150	16	19	225	M4
Dodge D-100/D-150	16	18	225	M4C
Dodge D-100/D-150	13	15	318	A3
Dodge D-100/D-150	14	15	318	A3
Dodge D-100/D-150	13	16	318	L3
Dodge D-100/D-150	14	17	318	M4
Dodge D-100/D-150	12	18	318	M4
Dodge D-100/D-150	12	15	318	M4C
Dodge D-100/D-150	11	16	318	M4C
Dodge D-100/D-150	11	13	360	A3
Dodge D-100/D-150	11	14	360	M4C
Dodge D-250	15	17	225	L3
Dodge D-250	15	17	225	M4C
Dodge D-250	12	14	318	A3
Dodge D-250	14	15	318	A3
Dodge D-250	11	16	318	M4C
Dodge D-250	12	15	318	M4C
Dodge D-250	11	13	360	A3
Dodge D-250	11	14	360	M4C
Ford F-150	15	18	300	A3
Ford F-150	17	22	300	L4
Ford F-150	17	18	300	M4C
Ford F-150	20	25	300	M4
Ford F-150 FI	14	15	302	A3
Ford F-150 FI	15	19	302	L4
Ford F-150 FI	16	21	302	M4
Ford F-150 FI	14	15	302	M4C
Ford F-150	12	15	351	A3
Ford F-250 Pickup 2WD	16	18	300	A3
Ford F-250	17	18	300	M4C
Ford F-250 FI	14	18	302	L4
Ford F-250 FI	14	15	302	M4C
Ford F-250	12	15	351	A3
GMC Caballero FI	17	21	262	L3
GMC Caballero FI	17	24	262	L4
GMC Caballero	16	19	305	L3
GMC Caballero	17	23	305	L4
GMC C-15	18	19	262	A3
GMC C-15	16	19	262	L4
GMC C-15	17	21	262	L4
GMC C-15	16	19	262	M3
GMC C-15	18	20	262	M4C
GMC C-15	17	21	262	M4
GMC C-15	16	20	262	M4
GMC C-15	15	18	305	L3
GMC C-15	15	20	305	L4
CMC C-15	15	18	305	L4
GMC C-15	14	18	305	M4C
GMC C-15	15	19	305	M4
GMC C-15 Diesel	19	23	379	L4
GMC C-15 Diesel	20	24	379	M4
GMC C-15 Diesel	20	24	379	M4C
GMC C-25	16	19	262	L4
GMC C-25	15	18	262	M4C
GMC C-25	15	18	305	L4
GMC C-25	12	15	305	M4C
GMC C-25	13	16	350	L4
GMC C-25 Diesel	17	22	379	L4
GMC C-25 Diesel	18	20	379	M4C
Jeep Comanche Diesel	28	31	126	M5
Jeep Comanche FI	20	23	150	L3
Jeep Comanche FI	20	24	150	M4
Jeep Comanche FI	24	27	15	M4
Jeep Comanche FI	22	26	150	M5
Jeep Comanche	17	19	173	L3
Jeep Comanche	17	22	173	M5
Toyota One-Ton	23	25	144	A4
Toyota One-Ton	23	28	144	M5

STANDARD PICKUPS/4WD

Model	City	Hwy.	Engine CID	†Trans.
Chevrolet K-10	15	18	262	L4
Chevrolet K-10	15	19	262	L4
Chevrolet K-10	15	18	262	M4
Chevrolet K-10	15	17	262	M4C
Chevrolet K-10	14	15	262	M4C
Chevrolet K-10	14	17	305	L4
Chevrolet K-10	12	16	305	M4
Chevrolet K-10	14	17	305	M4C
Chevrolet K-10	12	16	350	L4
Chevrolet K-10 Diesel	17	21	379	L4
Chevrolet K-10 Diesel	18	20	379	M4
Chevrolet K-10 Diesel	18	19	379	M4C
Chevrolet K-20	12	16	350	L4
Chevrolet K-20	10	15	350	M4C
Chevrolet K-20 Diesel	17	21	379	L4
Chevrolet K-20 Diesel	17	18	379	M4C
Chevrolet T-10	20	26	151	L4
Chevrolet T-10	22	25	151	M4
Chevrolet T-10	21	27	151	M5
Dodge W-100/W-150	15	16	225	M4C
Dodge W-100/W-150	12	14	318	A3
Dodge W-100/W-150	12	13	318	A3
Dodge W-100/W-150	11	16	318	M4C
Dodge W-100/W-150	12	15	318	M4C
Dodge W-100/W-150	10	12	360	A3
Dodge W-100/W-150	11	13	360	M4C
Dodge W-250	11	13	318	A3
Dodge W-250	11	14	318	M4C
Dodge W-250	10	12	360	A3
Ddoge W-250	11	13	360	M4C
Ford F-150	15	15	300	A3
Ford F-150	17	20	300	M4
Ford F-150	16	17	300	M4C
Ford F-150 FI	14	18	302	L4
Ford F-150 FI	15	18	302	M4
Ford F-150 FI	14	15	302	M4C
Ford F-150	12	13	351	A3
Ford F-250	16	17	300	M4C
Ford F-250 FI	14	18	302	L4
Ford F-250 FI	14	15	302	M4C
Ford F-250	12	13	351	A3
GMC K-15	15	18	262	L4
GMC K-15	15	19	262	L4
GMC K-15	15	18	262	M4
GMC K-15	14	15	262	M4C
GMC K-15	15	17	262	M4C
GMC K-15	14	17	305	L4